LTBS Workers Compensation Research

Quantitative Report for Phase 1

For the WorkCover Tasmania Board

School of Sociology and Social Work
University of Tasmania
June 2008

Assoc. Prof Douglas Ezzy

Dr Maggie Walter

Dr Allan Welch

CONTENTS

Introduction

The School of Sociology and Social Work at the University of Tasmania was commissioned by WorkCover Tasmania to conduct the Long Term Benefit Study to explore the following questions:

* What are the financial, social and health situations of long-term workers compensation recipients?

* Are there significant differences in the long-term financial, social and health outcomes of different compensation pathways'?

* What are the drivers for decision-making associated with the different compensation pathways?

The following report details the results of the Tasmanian Workers Compensation Long Term Benefits Study survey. It is divided into three sections.

Section One is the multivariate analyses. It provides a comparison of the relative influence of various employment, socio-demographic, workers compensation, and health variables on workers compensation outcomes. Four outcomes are examined: satisfaction with the workers compensation process, health, financial hardship, and social outcomes. This multivariate analysis comes first because it provides the most sophisticated analysis of the financial, social, and health outcomes of compensation recipients. It also examines different compensation pathways, comparing lump sum and weekly benefit recipients.

Section Two provides a detailed comparison of the health of workers compensation recipients with the health of the Tasmania population.

Section Three provides the univariate and bivariate statistical results from the survey initially provided to the Board in the preliminary report. They describe the general health, social, and financial situation of workers compensation recipients.

Phases 2 and 3 of the research, which will be reported on in the following two years, involve long qualitative interviews with recipients, and these studies will provide more information on the decision making processes associated with different compensation pathways.

Executive Summary

1. Introduction

a) This is the report for the first phase of the Long Term Benefits Study investigating the longer-term health, financial, and social outcomes for workers compensation claimants in Tasmania.

b) In the third quarter of 2007 a survey was mailed to workers compensation respondents who had accumulated at least $20,000 in weekly benefits or lump sum payments in the preceding eight years. This group represented the top three percent of claims by monetary value in that period. The vast majority of workers compensation claims are settled quickly and have minimal impact on workers. These claims, with compensation of less than $20,000, are not examined in this survey.

c) Valid responses were received from 505 people for the univariate and bivariate analyses and 507 people for the multivariate analyses.[1]

d) There have been a number of legislation and policy changes to workers compensation. The survey does not describe the effects of current workers compensation policy, which will be examined in a later phase of the research. Rather, the survey provides an over-view of the outcomes of the workers compensation process over the eight or nine years prior to 2007.

2. Key findings

a) Satisfaction with the workers compensation claims process is a significant factor that influences respondents' health, financial, and social outcomes.

b) Perceived employer support post-injury and/or illness contributed to satisfaction with the workers compensations claims process and, indirectly, to respondents' health, financial, and social outcomes.

c) Respondents who returned to work experienced fewer social difficulties and better health than their non-returned peers.

d) Financial hardship affects, and is affected by, health outcomes and satisfaction with the claims process.

e) Notwithstanding some evidence emerging from bivariate data analyses, multivariate data analyses indicated that compensation mode – lump sum or weekly benefits – appeared to have no significant effect on respondents' health, financial, or social outcomes.

[1] Two completed survey questionnaires from respondents receiving more than $20,000 lump sums were received after 11 November 2007, too late for inclusion in the univariate and bivariate analyses but were included in the later multivariate analyses.

3. Claims processes

a) The majority of respondents reported returning to work within 12 months, though not necessarily with the same employer.
b) Respondents receiving weekly benefits were more likely to return to work with the same employer.
c) The majority of respondents accessed rehabilitation services and the majority of them were satisfied with the relevant processes and outcomes.
d) The majority of respondents accessed legal services and the majority of them were satisfied with the relevant processes and outcomes.
e) Most respondents were satisfied with their general practitioner's provision of, and/or referrals to medical services, but fewer were satisfied with insurer-referred medical services.
f) A slight majority of respondents were dissatisfied with interactions with insurance services providers' personnel.
g) One third of respondents accessed the Tasmanian Rehabilitation and Compensation Tribunal and the majority of them were satisfied with the relevant processes and outcomes.

4. Health outcomes

a) The majority of respondents reported worse health post-injury and/or illness.
b) On all measures, the self-reported physical and mental health of respondents was worse than Tasmania's general population as surveyed by the Australian Bureau of Statistics.

5. Financial outcomes

a) The majority of respondents were dissatisfied with their lump sum payment and most reported that they had none of it remaining.
b) Financially, 93% reported they were "managing" or "barely managing" on their first reduction in weekly benefits. The remaining 7% reported "not managing" financially.
c) Financially, 82% reported they were "managing" or "barely managing" on their second reduction in weekly benefits. The remaining 18% reported "not managing" financially.
d) Respondents on weekly benefits were twice as likely to report difficulty paying their credit card accounts on time compared to respondents who received a lump sum.
e) Respondents were worse off financially compared to the Tasmania population as surveyed by the Australian Bureau of Statistics.

6. Social outcomes

a) The majority of respondents reported worse family life post-injury and/or illness.
b) The majority of respondents reported that they had someone to turn to for advice in times of crisis.

7. Interrelated outcomes

a) Post-injury and/or illness health status affects and is affected by claims process satisfaction, financial outcomes, and return to work.
b) Occupation affected some respondents' financial and social outcomes: labourers were more likely to report financial hardship while managers, administrators, and tradespeople were more likely to report negative social outcomes.
c) Younger respondents reported better post-injury and/or illness health outcomes than their elder peers, but worse financial and social outcomes.
d) Greater financial hardship appeared to be a product of the costs associated with poor health post-injury and/or illness, such as accessing ongoing health care after settlement, rather than a product of the lack of income from not working.
e) The adequacy of lump sum payments, as indicated by satisfaction with the payment, affected respondents' financial and social outcomes post-injury and/or illness, but not health outcomes.
f) Post-injury and/or illness anxiety-related disorders magnified the social isolation, relationship strains, and social stigmatisation experienced by all respondents.

SECTION 1: Multivariate Analyses

Overview

Section One of the report details the results of the multivariate analysis of the Tasmanian Workers Compensation Long Term Benefits Study survey. This mail survey collected data from 507[2] respondents who had made workers compensation claims between 1 July 1999 and 30 June 2007. All respondents had received lump sums or weekly benefits in excess of $20,000, which constitutes the top three percent of all claims.

The social, health, and financial situations of clients are examined to determine whether they are influenced by socio-demographic factors, pre-injury employment variables, aspects of the compensation process, and other personal and health variables. The analysis uses Ordinary Least Square (OLS) regression statistical techniques to assess the influence of these variables on the three key areas of this research: longer duration worker's compensation clients' financial situation, social, and health outcomes. Based on results from the earlier analysis, a model of satisfaction with the overall workers compensation process and the influence mode of payment were also analysed.

Improvements in health for workers compensation recipients are strongly influenced by satisfaction with the workers compensation process. Satisfaction with the process is a general indicator of the quality of medical care, and legal, insurance, and other advice given to the workers compensation recipient. This suggests that improving the quality of service provided to workers compensation recipients will improve their health outcomes, engagement and satisfaction with the process, which in turn reduces their financial hardship and improves their likelihood of returning to work.

Perceived employer support post-injury and/or illness has a strong impact on satisfaction with the workers compensation process. Employer support is significant in improving satisfaction with the process, but it is not directly related to any of the other outcomes. However, employer support has an indirect effect on the other outcomes, as it is one of the strongest influences on satisfaction with the workers compensation process, which in turn has a significant impact on social and health outcomes.

The costs associated with poor health are one of the most significant influences on financial hardship for workers compensation recipients. The worse the person's health and physical mobility, the greater the financial hardship they experience. This result underlines the importance of maximising improvements in general health, and the provision of quality rehabilitation services and medical care, if workers compensation recipients are to avoid financial hardship.

---

[2]This number varies from the sample of 505 cited in the univariate and bivariate report contained in Section 3 of this document. Two completed survey questionnaires from respondents receiving more than $20,000 lump sums were received after 11 November 2007, too late for inclusion in the univariate and bivariate report but are included in the multivariate report.

The perceived adequacy of the payment is an important influence on outcomes of the workers compensation process. Individuals who are dissatisfied with their payment are much more likely to report worse social and financial outcomes, and be dissatisfied with the workers compensation process. However, satisfaction with the payment is not related to health outcomes or levels of physical functioning.

Compensation mode (lump sum or ongoing weekly benefits) does not appear to play a significant role in the social, financial, and health outcomes of workers compensation claimants. While these results need to be treated with caution, due to limitations in the data and the complexities of legislation changes, this finding strongly suggests that it is not compensation mode per se that influences outcomes for longer duration clients. In this data most lump sums were received prior to 2005. Since 2005 workers are more likely to receive weekly benefits and are also more likely to report overall satisfaction with the workers compensation process. These results suggest that it is the improvements in the process, such as improvements in health care, rehabilitation, and the move away from an adversarial system, rather than the way compensation is paid, that is the most important factor in improving outcomes. These questions will be examined in more detail in phases 2 and 3 of the Long Term Benefits Study.

As might be expected, general health, financial hardship, and social difficulties are all related. Lower levels of general health and physical functioning are associated with greater financial hardship and social difficulties. Individuals with worse general health are also more likely to be dissatisfied with the process. People with anxiety related injuries or illnesses are also less satisfied with the workers compensation process and have lower social well-being scores.

The effects of a workers compensation claim vary considerably depending on a worker's occupation. Managers and administrators and those working in the trades are more likely to experience negative social outcomes. Labourers are more likely to experience financial hardship.

The social isolation and stigmatisation experienced by all workers compensation recipients is magnified for people with anxiety-related injuries and/or illnesses, and for people who are already socially isolated, and people whose family life is strained or disintegrates. For these groups the social challenges of a workplace injury and/or illness are compounded by the other social stressors on their lives. Younger people also experience worse social and financial outcomes, although their health outcomes tend to be better than those of older people.

People who have returned to work experience less social difficulties and are more likely to be healthy. Those who rely on Centrelink payments as their main source of income experience greater levels of financial hardship.

Introduction
Data from the WorkCover Tasmania's survey of longer-term workers compensation claimants was first analysed using univariate and bivariate statistical techniques and then was further analysed using multivariate statistical techniques. The WorkCover mail survey collected data from 507 respondents who made workers compensation claims between 1 July 1999 and 30 June 2007. All respondents had received lump sums or weekly benefits in excess of $20,000, which constitutes the top three percent of all claims.

Analysis Models

The analytical technique of ordinary least squares (OLS) regression is used to gauge the importance of a range of socio-demographic, employment, workers compensation related variables on the three key areas of this research: the financial situation; social well-being, and health outcomes of longer duration workers compensation clients. The value of OLS regression analysis is that it enables the influence of the various factors to be examined independently of the other factors. A significance level of 0.05 is used in all the analyses below.

In view of the results from the earlier analysis a model of satisfaction with the workers compensation overall process was also analysed. This led to the development of four multivariate models each examining a different aspect of the research question.

Model 1:
Workers Compensation Process Satisfaction measured by a Satisfaction with Process Index

Model 2:
Financial situation measured by the Financial Hardship Index;

Model 3:
Social Well-being measured by the Social Impact Index

Model 4
Health Outcomes measured by the General Health Indicator

The indexes were constructed by combining single variables into composite measures. Descriptions of the components and imputation process are detailed at the beginning of the report of each model's results.

Independent Variables
The variables included in each analysis are selected on the basis of the bivariate results and their objective relevance and theoretical applicability to the dependent variable. Inclusion of independent variables in each model was based on their conceptual relevance and varies slightly between analyses. The construction and attributes of each independent variable are fully detailed below. The independent variables fall into four categories: social demographic variables; employment variables; workers compensation variables; and health and personal variables.

The social demographic variables include gender partnered status and the respondent's current main source of household income and are listed in Table 1.

Table 1: Socio-Demographic Explanatory Variables

Socio-Demographic Variables	
Age	Respondent's age in years (20 – 75)
Gender	Dichotomous categorical variable 1 = Male, 0 = Female
Partnered Status	Categorical variable with 3 dummy variables 1 = Never Married 0 = Other 1 = Widowed/Separated/Divorced, 0 = Other 1 = Married or De facto, 0 = Other Base category: Married or De facto
Current Main Income Source	Categorical variable with 4 dummy variables 1 = Own/Spouses and Own employment 0 = Other 1 = Spouses Employment, 0 = Other 1 = Centrelink, 0 = Other 1 = Workers Compensation Payments, 0 = Other 1 = Investments, 0 = Other Base category: Own/Spouses and Own employment

Variables that related to the workers compensation claimant's pre-injury employment are listed in Table 2. These include pre-injury occupation, hours worked per week, job satisfaction in pre-injury employment and how long the worker had been in that position.

Table 2: Employment Related Explanatory Variables

Variable	Description
Respondent Characteristics	
Job Related Variables	
Respondents' Occupation Pre-Injury/Illness	Categorical variable with 5 dummy variables 1 = Professional/Management, 0 = Other 1 = Trades, 0 = Other 1 = Clerical/Service 0 = Other 1 = Production/Transport or related, 0 = Other 1 = Labour 0 = Other Base Category: Professional/Management
Worked Per Week pre-injury/illness	Hours per week 4 – 84
Satisfaction with Job pre-injury/illness	Dichotomous categorical variable 1 = dissatisfied 0 = satisfied
Job tenure pre injury/illness	Categorical variable with 3 dummy variables 1 = Less than 1 year, 0 = Other 1 = 1-5 years 0 = Other 1 = More than 5 years 0 = Other Base Category: Less than one year

Next, a battery of workers' compensation related variables are developed (Table 3). These include compensation mode, how satisfied the claimant reported that they were with their compensation payment(s), the respondents' ratings of the level of employer support they received, the workers compensation injury type, years since the workers' compensation claim, and whether or not the respondent had returned to employment since the claim.

Table 3: Workers Compensation Explanatory Variables

Workers Compensation Related Variables	
Compensation Mode	Dichotomous categorical variable* 1 = Lump Sum 0 = Weekly Benefit
Satisfaction with Payment (lump sum & weekly benefit)	Ordinal variable in 4 levels 1 = Very Dissatisfied 2 = Dissatisfied 3 = Satisfied 4 = Very Satisfied
Employer Support Index	Imputed from variables A14b, A14c, A14c Ordinal variable in 4 levels 1 = No support offered 2 = Minimal employer support offered 3 = Some employer support offered 4 = High employer support offered
Injury Type	Categorical variable with 4 dummy variables 1 = Soft tissue/contusions/disc displacement, 0 = Other 1 = Other injuries, 0 = Other 1 = Anxiety disorders, 0 = Other 1 = Fractures/lacerations, 0 = Other Base category: Fractures/lacerations
Returned to Work	Dichotomous categorical variable 1 = Returned to work 0 = Not returned to work
Years since claim	Continuous variable (1-8 years)

* When claimants received both a lump sum and weekly benefits, these categories default to the lump sum category

The final inclusions are a set of health and social functioning variables (Table 4). Current physical functioning is measured by an imputed physical functioning index that combines a number of health and physical capacity data items. Similarly, indicators for social support and level of impact on the family from being a longer-term workers compensation claimant are imputed through the amalgam of related data items. These indexes all meet the criteria for statistical reliability.

Table 4: Health and Personal Variables

Variable	Description
Respondent Characteristics	
Health Related Variables	
Physical Functioning Index	Ordinal variable with range of scores 0-100 Higher score = higher level of physical functioning Reliable index (Cronbach's alpha = .92)
Social Variables	
Social Support Indicator	Items D8a - D8g combined to form one indicator of perception of social support available. Higher score equals higher level of support Reliable index (Cronbach's alpha = .93)
Family Impact Indicator	Imputed composite variable: D1, D4a, D4c, D4b Higher value = more negative impact on family life Reliable index (Cronbach's alpha = .63)

Results

In the models below, we first present the index or indicator which is the dependent variable, and which the model seeks to explain. Next, we present the results of the regression model with unstandardised B coefficients. Unstandardised B coefficients allow meaningful interpretation of the variables (we can say, for example, that partnered people score one point lower on the financial hardship scale), but do not allow for comparisons between variables. Next, we present the major influences on the outcome, with standardized beta coefficients. Standardized beta coefficients do not allow for meaningful interpretation of the variables, but they do allow for the relative importance of variables to be compared (we can say, for example, that age and satisfaction with the payment have a stronger influence on financial hardship than does general health).

Satisfaction with the Process

The univariate and bivariate analyses of the survey data found that substantial numbers of respondents reported dissatisfaction with various aspects of the workers compensation process. To provide a measure of respondents' overall satisfaction with the workers compensation process these data were combined to create a *Satisfaction with Process* index.

The *Satisfaction with Process* index is derived from respondents' reported satisfaction with their interaction with general practitioners, medical specialists, legal services, rehabilitation, the compensation tribunal, and insurance agents. Not all respondents had participated in all these aspects of the compensations process (84% provided responses to three or more of these categories). As such, the index does not perfectly reflect satisfaction on all items; rather it provides a proxy indicator for overall worker satisfaction with the workers compensation process. The imputation and construction details of this index are detailed below.

Table 5: Components of the satisfaction with process index

Response Variable	Variable Description
Satisfaction with Process Index	Satisfaction with Workers Compensation Process Index. Process satisfaction imputed by adding item scores (1-4) and dividing by number of processes for each case. *Processes* — *Cases* Insurance — 293 GP referred specialist — 422 Insurance referred specialist — 421 Legal Services — 355 Rehabilitation — 307 Rehab & Compo tribunal — 178 The Index range = 1.00 - 4.00 with higher scores indicating greater satisfaction with the workers compensation process. Index not amenable for computing reliability statistics

Table 6: OLS Regression Examining Satisfaction with Process

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Age in years	.004	.003	.223
Sex	.002	.064	.975
Partnered Status: Never Married,	-.173	.100	.085
Partnered Status: Widowed/Sep/Divorced*	-.138	.068	.043
Main Income Source: Spouses income	-.103	.081	.202
Main Income Source: Centrelink	.098	.082	.235
Main Income Source: Workers Compensation Payments*	.171	.087	.050
Main Income Source: Investments	.092	.144	.522
Hours Worked Per Week- Pre Injury	.002	.002	.343
Occupation: Labour/Related*	-.191	.089	.033
Occupation: Production/Transport	-.113	.090	.209
Occupation: Clerical Sales	-.062	.080	.436
Occupation: Trades*	-.217	.095	.023
Job tenure: 1-5 years	-.039	.093	.679
Job tenure: >5 years	.065	.091	.473
Job satisfaction*	-.195	.077	.012
Compensation mode: Lump Sum	-.049	.064	.443
Satisfaction with payment *	.233	.033	.000
Employer Support Indicator*	.029	.007	.000
Injury Type: soft tissue	-.133	.077	.085

Table 6: OLS Regression Examining Satisfaction with Process (continued)

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Injury Type: Other Injuries	-.042	.111	.703
Injury Type =anxiety*	-.223	.103	.032
Years since claim 2007*	-.050	.015	.001
Has returned to work?	-.008	.063	.900
General health Indicator*	.080	.027	.003
Physical function Indicators	.001	.001	.377
(Constant)	1.971	.246	.000
N	507		
Adjusted R2	.25		

Data Source: Workers Compensation Survey 2007

Satisfaction with the workers compensation process, as indicated by the *Satisfaction with Process* index was modelled against the four categories of independent variables. The regression model explains 25 percent of the variation in respondent's satisfaction with the workers compensation process, which is in the typical range expected in this sort of analysis.

Compensation mode (whether a person has received a lump sum or only weekly benefits) is not a significant influence on satisfaction with the workers compensation processes. This finding takes account of any bias that might be introduced into the results by legislation changes. In the univariate and bivariate analyses, it was shown that until 2005 the majority of respondents settled their claim with lump sums, and since then, weekly benefits. The regression model includes the temporal variables of the number of years since the claim and the person's age, and these control for, and partially remove the effect of this bias.

Workers compensation factors clearly have the greatest influence on satisfaction with the process, and the most influential factor of these is satisfaction with the compensation payment. The more satisfied respondents are with their payments, the higher their satisfaction with the process. Satisfaction with the payment is scaled from 1 (very dissatisfied) to 4 (very satisfied). For every one point increase in satisfaction with the payment there is a corresponding increase in the overall satisfaction with the process of 0.23 points (on a scale of 1 to 4).

The next most influential factor is the level of employer support received. Those reporting high levels of employer support post injury and/or illness are much more likely to be satisfied with the process. Those whose main source of household income is workers compensation payments are also much more likely to be satisfied with the process than those with income from other sources, such as spouses, Centrelink, or employment.

The amount of time since claim lodgement is also predictive of satisfaction with the process. The longer it is since a person initially made their claim, the less satisfied

respondents tend to be with the process. Similarly, those who report worse general health are less likely to be satisfied with the process. The type of injury also achieves statistical significance, but only for those with an anxiety-related injury and/or illness. This group have statistically significantly lower process satisfaction than those with fractures or contusions.

Pre-injury/illness occupation is also influential, with those previously working in the trades or as labourers and related occupations having statistically significantly lower satisfaction outcomes than professionals and/or managers. Further, those who were dissatisfied with their pre-injury and/or illness job were statistically significantly more likely to be dissatisfied with the compensation process. Finally, respondents who are separated or divorced have statistically significantly lower process satisfaction outcomes than those who are partnered currently.

Those factors that are not predictive of process satisfaction levels are also of note. These include gender, with men no more likely to be satisfied with the process than women, and the time employed in the pre-injury/illness job, where those who were employed for more than 10 years were no more likely to be satisfied with the process than those employed either under five years, or between five and 10 years. Also, whether a respondent had returned to the workforce or not since their workers compensation claim, did not influence their reported satisfaction with the process.

Interpretation

As shown in the Table 7 below, the adequacy of the payment and employer support are clearly the most important influences on satisfaction with the workers compensation process. Being satisfied that the compensation received was appropriate, regardless of whether that compensation was received via a lump sum or in weekly payments, directly impacts on how satisfied the respondent felt with workers compensation overall. Similarly, employer support is a linchpin of satisfaction with process. The perceptions of post-injury and/or illness support translates directly into satisfaction with the process, providing a more predictive influence than other statistically significant variables such as injury type, previous occupation, job satisfaction, or current health. This has important policy implications. The finding highlights the importance of ensuring payment compensation amounts are adequate. Moreover, it underlines the value of ensuring the reality of, or communication of, post-injury and/or illness support from the employer to the workers compensation claimant.

The fact that the number of years since claim is influential suggests that either the processes in the past were less responsive than they have been in more recent years (although this is only a period of seven years) or that as time passes since the claim, respondents reflect less positively on the process.

Similarly, in relation to health, those with better self-reported health are more likely to feel that the process has served them well. The finding that those whose injury and/or illness is classified as anxiety related are statistically significantly less likely than those with other injury types to be satisfied with the workers compensation process suggests that the process might not be meeting the needs of this group currently.

Table 7 presents a summary of standardised beta coefficients at the .05 significance level for variables from the OLS model.

Table 7: Major influences on satisfaction with process

Variable	Standardised beta coefficient
Satisfaction with payment	0.29
Employer support	0.16
Years since claim	-0.15
General health	0.15
Anxiety-related Injury	-0.13
Occupation: Trades	-0.12
Occupation: Labouring	-0.11
Job satisfaction	-0.11
Widowed/Separated/Divorced	-0.09
Main Income from Compensation	0.08

(Standardised beta coefficients for variables of 0.05 significance from OLS model above)

Explaining why managers and/or professionals are more satisfied with the workers compensation process than workers in trades or labouring occupations is more difficult. One explanation may be that the process is more manageable for those with higher levels of education and perhaps they are used to dealing with regulatory bodies and paperwork. The relationship between previous job satisfaction with the process is more visible. Those who were unhappy in their previous employment are likely to begin the claims process from a more negative standpoint.

Finally, those whose current main household income is workers compensations are more satisfied than those with income from other sources. The obvious explanation here is that those supported by workers compensations monies felt that the process actively supported them.

It is worth recalling that *Satisfaction with Process* is a general indicator that includes medical care as well as rehabilitation, legal, insurance, and other aspects of the process. Other research has suggested that this satisfaction with the process is related to a variety of factors:

> Injured workers who reported having little difficulty obtaining initial care rated their treatment experience much more positively than workers who reported having some or a lot of difficulty accessing care (β = 1.34, p <.001). Injured workers who were very satisfied with the technical care they received also rated their treatment experience more favourably (p = .01). Finally, ratings of the provider's understanding of the patient's job activities, an indicator of the provider's occupational medicine expertise, was a strong predictor of overall treatment experience (β = 0.91, p =.003) (Wickizer et al. 2004: 738)

Social Consequences

The *Social Consequences* score index is calculated from questions about a person's social life at the time of the survey compared to their pre-injury and/or illness social life. It includes questions about whether their injury has changed their level of participation in the community and, whether since their injury, they feel less accepted, are more self conscious in social situations, are less likely to go out, have less social contact, or feel stigmatised. As such, the index is a broad indicator of the extent to which the workers compensation recipient considers their injury has changed their social life. Higher scores indicate a greater negative social impact.

Table 8: Components of the social impact index

Social Impact Index	Imputed from 8 variables: D5 Social Life compared to before injury illness 1-4 D6 Level of participation in community and social activities compared to before injury/illness 1-5 D7 items on how social life affected D7a: Less accepted now D7b: self-conscious in social situations D7c: go out less D7d: less social contact with non-family D7f*: Feel socially stigmatised Index values computed using principal components analysis. The index ranges from 1 to 5 with higher index scores indicating greater negative impact on social activity Index reliable, (Cronbach's alpha = .930)

* D7e Support from workmates not included as factor analysis indicates it is different to other D7 items

Table 9: OLS Regression Examining Social Consequences

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Age in years*	-.013	.004	.001
Sex	-.023	.077	.760
Partnered Status: Never Married	.223	.121	.066
Partnered Status: Widowed/Sep/Divorced	.066	.082	.423
Main Income Source: Spouses income	.158	.095	.097
Main Income Source: Centrelink	-.049	.098	.618
Main Income Source: Workers Compensation Payments*	.257	.103	.013
Main Income Source: Investments	-.006	.171	.970
Hours Worked Per Week- Pre Injury	.000	.003	.912
Occupation: Labour/Related*	-.256	.107	.017

Table 9: OLS Regression Examining Social Consequences (continued)

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Occupation: Production/Transport *	-.296	.106	.006
Occupation: Clerical Sales*	-.220	.094	.020
Occupation: Trades	-.129	.113	.254
Job tenure: 1-5 years	.156	.110	.158
Job tenure: >5 years	.175	.107	.105
Job satisfaction	-.138	.092	.135
Compensation mode: Lump Sum	.020	.077	.789
Satisfaction with payment *	-.115	.042	.006
Employer Support Indicator	.001	.009	.936
Injury Type: soft tissue	.097	.092	.290
Injury Type: Other Injuries	.112	.131	.390
Injury Type =anxiety *	.631	.123	.000
Years since claim 2007	.032	.018	.082
Has returned to work?*	-.271	.075	.000
General health Indicator*	-.130	.032	.000
Physical function Indicators*	-.007	.001	.000
Satisfaction with Process*	-.115	.054	.035
Social Support Indicator*	-.028	.005	.000
Family life post injury indicator *	.075	.013	.000
Hardship Indicators*	.035	.011	.003
(Constant)	1.401	.410	.001
N	507		
Adjusted R Square	.554		

Data Source: Workers Compensation Survey 2007

There are broad arrays of factors that prove influential on the level of social impact experienced by workers compensation recipients. Compensation mode is not influential or predictive of social consequences. The standout factor is having an anxiety related injury or illness, which results in greater social isolation and perceived stigmatisation. People with anxiety injuries scored 0.63 points higher on the social consequences scale (with a range of 1 to 5) compared to those with other injuries types.

Second, those who have a strong family life and good social support networks are less likely to experience the social difficulties that others experience. Older respondents are also less likely to experience negative social outcomes.

Occupational category is also influential. Managers and administrators and those working in trades are more likely to experience negative social outcomes than those

who worked pre-injury in production or transport, clerical work or sales, or in labouring positions.

People whose main source of household income is currently workers compensation have worse social outcomes than those with income from other sources. Relatedly those who have not yet returned to work also experience more negative social impacts. Lower satisfaction with payment outcome along with lower satisfaction with the workers compensation process is also associated with worse social outcomes.

Poorer health and reduced physical functioning are statistically significantly associated with worse social outcomes. Finally, the greater the level of financial hardship, the more likely the claimant is to have worse social outcomes.

Table 10: Major influences on social consequences

Variable	Standardised beta coefficient
Anxiety Injury	0.24
Family life post injury	0.22
Physical function	-0.21
Social Support	-0.18
General health	-0.16
Age	-0.13
Returned to work	-0.13
Financial Hardship	0.12
Occupation Production/Transport	-0.12
Satisfaction with payment	-0.10
Occupation Labourer	-0.10
Occupation Clerical/Sales	-0.09
Main Income from Compensation	0.08
Satisfaction with process	-0.08

(Standardised beta coefficients for variables of 0.05 significance from OLS model above)

Interpretation

Previous studies have already demonstrated that worse health and financial hardship result in social isolation and a sense of social ostracism. Boden and associates, for example, observed that '…studies show that injured workers' ability to continue to perform their social, family, and work roles is compromised by their diminished earnings, long-term physical limitations, depression, fear, and anger' (Boden, Biddle, & Spiedler 2001, p. 399).

It is also clear that being on workers compensation is itself stigmatising and socially isolating. A New Zealand-government sponsored study provides an example of precisely this process: 'Mark found it very hard to cope with the teasing he got from friends when he could not work and was on ACC [Accident Compensation

Corporation]. For him it was a stigma that was difficult to deal with' (New Zealand, 2002, p. 113).

The results of the multiple regression demonstrate that the social isolation and stigmatisation experienced by all workers compensation recipients is magnified for people with anxiety-related injuries and/or illnesses, and for people who are already socially isolated, and people whose family life is strained or disintegrates. For these groups the social challenges of a workplace injury and/or illness are compounded by the other social stressors on their lives.

Contrastingly, those who are satisfied with the process, which in turn is a product of an adequate compensation payment and good employer support, report less social isolation and stigmatisation.

It is also clear that people who have established social supports that are not related to work, or to the money that comes from working, are better able to deal with the isolation and stigma generated by a workplace injury and/or illness. This is reflected in better social outcomes for older people whose social networks are likely to be better established. Also, it probably explains why managers and administrators and those in trades experience worse social outcomes: because the social networks of workers in these middle class occupations are more likely to be dependent on consumerism for socially satisfying lives and the money to support these consuming behaviours, than those who work in less well paid occupations such as clerical, sales, labouring, production, and transport.

Those whose injury and/or illness is classified as anxiety or anxiety related report greater social dislocation, even though their financial and health outcomes are no different to those with other injuries. This group also report less satisfaction with the workers compensation process than other injury and/or illness types.

Financial Hardship

Financial Hardship is an index that provides an indicator of a person's current financial resources, e.g., could they access $2000 in one week if needed, whether they were able to pay bills on time, whether they had to go without heating or meals, and whether they sought assistance from family or community organizations. As such, people who score highly on this index are experiencing considerable financial hardship.

Table 11**: Components of the financial hardship index**

Financial Hardship Index	Imputed from 3 variables: C2. How likely can access $2000 if needed: Scores 1-4 C3a-i. 9 hardship items. Score allocated for each item checked 1-9 C8. How well managing financially scores 1-4 Index range: 2 -17 with higher scores equalling more hardship Index reliable (Cronbach's alpha = .720)

Table 12: OLS Regression Examining Financial Hardship

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Age in years*	-.083	.015	.000
Sex	.106	.310	.732
Partnered Status: Never Married*	1.103	.482	.023
Partnered Status: Widowed/Sep/Divorced*	1.186	.326	.000
Main Income Source: Spouses income	-.369	.386	.340
Main Income Source: Centrelink*	.804	.393	.041
Main Income Source: Workers Compensation Payments	-.477	.417	.253
Main Income Source: Investments	-.400	.688	.561
Hours Worked Per Week- Pre Injury	-.007	.011	.563
Occupation: Labour/Related*	.981	.430	.023
Occupation: Production/Transport	.248	.430	.563
Occupation: Clerical Sales	.212	.382	.580
Occupation: Trades	.111	.458	.808
Job tenure: 1-5 years	-.463	.446	.300
Job tenure: >5 years*	-.996	.433	.022
Job satisfaction	-.713	.371	.055
Compensation mode: Lump Sum	-.425	.308	.168
Satisfaction with payment *	-.683	.166	.000
Employer Support Indicator	-.049	.036	.177
Injury Type: soft tissue	.154	.370	.677

Table 12: OLS Regression Examining Financial Hardship (continued)

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Injury Type: Other Injuries	.061	.529	.908
Injury Type =anxiety	.706	.496	.155
Years since claim 2007	.043	.074	.562
Has returned to work?	-.236	.303	.437
General health Indicator*	-.325	.128	.011
Physical function Indicators*	-.019	.006	.001
Satisfaction with Process	-.199	.219	.363
Social Support Indicator*	-.085	.020	.000
(Constant)	15.999	1.284	.000
N	507		
Adjusted R Square	.344	.	

Data Source: Workers Compensation Survey 2007

Overall, this analysis demonstrates that those at the greatest risk of financial hardship after a workplace injury and/or illness are those who have not built up financial resources, such as young people, or those in labouring occupations.

Age is strongly associated with financial hardship; younger respondents fare worse than their older counterparts. For every twelve years older a person is they score one point lower on the financial hardship scale (on a scale of 2 to 17).

Marital status has an impact on financial hardship. Those who have never been married or are separated, divorced or widowed score on average more than one full point higher on the hardship scale than those who are currently partnered. Similarly, those without good social support networks are also more likely to experience financial hardship.

Occupational variables are also influential. Those previously in labouring occupations experience greater hardship than managers and administrators. Those who were in their pre-injury job more than 5 years experience less financial hardship than those employed for less than 12 months prior to their injury and/or illness. Similarly, being satisfied with the pre-injury and/or illness job reduces financial hardship, presumably because satisfying jobs would include a satisfying level of remuneration.

On workers compensation variables, the higher the levels of satisfaction with the workers compensation payment, the lower the hardship score. People who receive Centrelink payments as their primary income source typically experience greater financial hardship. People in receipt of Centrelink payments report 0.8 of a point higher hardship scores.

Better physical health and physical functioning is also related to less financial hardship. Major influences on financial hardship are presented in Table 13.

Table 13: Major influences on financial hardship

Variable	Standardised beta coefficient
Age	-0.24
Satisfaction with payment	-0.17
Social Support	-0.17
Physical function	-0.17
Job tenure greater than 5 years	-0.15
Widowed/Separated/Divorced	0.14
Occupation: Labourer	0.11
General health	-0.12
Main Income Source Centrelink	0.09
Never Married	0.09

(Standardised beta coefficients for variables of 0.05 significance from OLS model above)

Interpretation

Younger people are more likely to experience financial hardship when injured at work. This may reflect a variety of causes, such as limited financial savings, and greater debts.

The only statistically significant workers compensation process variable that influences financial hardship is the adequacy of the compensation payment. Mode of payment and support through the process do not help in preventing financial hardship. The finding that many workers consider the compensation payment unsatisfactory (see tables 89 and 94), and report experiencing considerable financial hardship, suggests that dissatisfaction with the compensation amount reflects real financial hardship.

It is notable that returning to work does not reduce financial hardship. It is difficult to know why this is the case. It may be that the financial benefits of returning to work take some time to restore financial security after the costs incurred by a workplace injury or illness.

When people experience financial hardship after a workplace injury or illness, they turn to friends and family for financial support. In an American study, Leigh, Markowitz, Fahs, & Landrigan (2000, p. 11) reported that: 'Using the nominal payment method, we found that injured or ill workers and their families absorbed about 44 percent of the costs [of workers compensation]'. We are unable to calculate and the exact percentage, but the results above suggest that a similar process is operating here, where families and friends absorb substantial proportions of economic consequences of the financial hardship experienced by those who suffer workplace injury or illness.

General Health

The General Health scale is one question that asks people for a self-rating of their current general health and is one of the SF-36 items. Research demonstrates that it provides a good general indicator of overall health.[3]

Table 14: Components of the general health scale

General Health	Scaled variable in 5 levels, with higher values indicating better health. 1 = Poor 2 = Fair 3 = Good 4 = Very Good 5 = Excellent

Table 15: OLS Regression Examining General Health

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Age in years*	-.014	.006	.012
Sex	-.054	.118	.646
Partnered Status: Never Married	.067	.185	.717
Partnered Status: Widowed/Sep/Divorced	.031	.126	.809
Main Income Source: Spouses income	-.235	.147	.111
Main Income Source: Centrelink	-.277	.150	.065
Main Income Source: Workers Compensation Payments*	-.324	.157	.040
Main Income Source: Investments	-.139	.263	.597
Hours Worked Per Week- Pre Injury	-.005	.004	.258
Occupation: Labour/Related	-.198	.165	.230
Occupation: Production/Transport	-.268	.163	.102
Occupation: Clerical Sales	-.258	.145	.076
Occupation: Trades*	-.371	.174	.034
Job tenure: 1-5 years	-.291	.170	.088
Job tenure: >5 years	-.311	.165	.061
Job satisfaction	.039	.142	.784
Compensation mode: Lump Sum	.032	.117	.786
Satisfaction with payment	.117	.064	.067
Employer Support Indicator	.023	.014	.094
Injury Type: soft tissue	-.257	.140	.068

[3] Refer to Brazier et al. (1992); Ware (2000); and Bjorner, Frayers, & Idler (2005).

Table 15: OLS Regression Examining General Health (continued)

Variable	Unstandardised Coefficients		Sig.
	B	Std. Error	
Injury Type: Other Injuries	-.304	.201	.132
Injury Type =anxiety	-.135	.186	.466
Years since claim 2007	.029	.028	.313
Has returned to work?*	.629	.110	.000
Hardship Indicators*	-.071	.017	.000
Satisfaction with Process*	.277	.083	.001
Social Support Indicator	-.003	.008	.672
(Constant)	3.140	.539	.000
N	507		
Adjusted R Square	.271	.	

Data Source: Workers Compensation Survey 2007

The most important correlate of general health is returning to work. Those who have returned to work score 0.6 points higher on the general health scale, which ranges from 1 to 5. The obvious explanation for this is that people with better general health are more likely to return to work. The finding that those whose main income is from workers compensation payments are likely to score just under one third of a point lower on the general health scale mirrors this.

Financial hardship is the next most important influence on general health, with those who experience the greatest financial hardship being likely to score one point lower on the general health scale than those who experience the least financial hardship. It is difficult to know whether financial hardship results in worse health, or worse health leads to financial hardship.

Interestingly, satisfaction with the workers compensation process is a significant contributor to general health. For every one point increase in satisfaction with the process, on a scale of one 1 to 4, there is more than a quarter of a point increase in general health, also on a scale of one to four.

Older people are likely to be less healthy. For every seven years older a person is they are likely to score one tenth of a point lower on the general health scale. People who worked in trades occupations are also likely to have worse general health. Those in trades occupations on average score 0.37 points lower on the general health scale than people in other occupations.

Table 16: Major influences on General Health

Variable	Standardised beta coefficient
Return to Work	0.25
Financial Hardship	-0.20
Satisfaction with Process	0.15
Age	-0.14
Occupation: Trades	-0.11
Main Income from Compensation	-0.09

(Standardised beta coefficients for variables of 0.05 significance from OLS model above)

Interpretation

The regression model suggests that improvements in health are primarily influenced by satisfaction with the workers compensation process. Satisfaction with the process is a general indicator of the quality of medical care, and legal, insurance, and other advice given to the workers compensation recipient. Improving the quality of service provided to workers compensation recipients will in turn improve their health, which in turn reduces their financial hardship and improves their likelihood of returning to work. Nevertheless, the survey data and regression models do not permit causal pathways to be described with any statistical certainty. For example, while it seems sensible to assume that when people return to work it is because of improvements in health, caution is necessary in interpreting return to work as an indicator of restored health. In their study of workers compensation claimants in Ontario, Canada, Baldwin, Johnson, & Butler (1996) found that 'Return to work is influenced by many factors unrelated to medical care…' (p. 640), citing influences such as '…economic incentives, demographic characteristics of the worker, and the characteristics of the pre-injury job…' (p. 640).

We know from the *Financial Hardship* model that workers compensation recipients continue to experience financial hardship after returning to work. It appears that poor health as a consequence of workplace injury or illness has an ongoing effect in creating financial hardship. This model underlines the importance of rehabilitation services and medical care so that workers compensation recipients are able to avoid the financial hardship that is associated with poor health.

The explanation for the relationship between compensation income and health is reasonably clear. People who have been most recently injured, and therefore whose health is worse, are also those who are most likely to rely on workers compensation payments for their income.

Limitations of the study

As indicated above and elsewhere in this document, this study investigates claims process, health, financial, and social outcomes for long-term workers compensation claimants in Tasmania. The research population identified for the study comprises the top three percent of claims in relation to lump sum payment or weekly benefits payments in the period 1999 to 2007 (details on page 42). This population definition implies substantial engagement with workers compensation processes such that claimants' health, financial situation, and social relationships are affected.

Not all those identified in the research population responded to our invitation to be involved in the research, and of the 2,231 persons eligible, 507 provided useful responses. As indicated on page 42, this resulted in some divergence from the research population's profile in terms of age, sex, and time of claim. Thus, these multivariate analyses have been prepared in light of that information and, so far as practicable, its effects have been considered. Nevertheless, these analyses should be read in that context and there may be some variance between the patterns described here and those in the population of all workers compensation claimants.

SECTION 2: Comparing Health and Financial Outcomes for LTBS Claimants and Population Norms for Tasmania

Introduction

This section reports analyses of the self-reported data provided by respondents in the WorkCover Tasmania Long Term Benefits Study (LTBS) mail survey in 2007. These data were compared with Tasmanian population data from the Australian Bureau of Statistics (ABS) to ascertain comparative levels of health and financial well being.[4]

SF-36 Health Scales

Included in the LTBS mail survey were eight scales of health and well being reported in the ABS data. A ninth scale, health transition, was surveyed in the LTBS for comparison with ABS data. Analyses for this scale are reported immediately following the report for the eight health and well being scales.

The Short Form-36 (SF-36) health and well being scales employed by the ABS have been used in a number of studies to make comparisons between injured and/or ill people and population norms.[5] Dembe (2001) suggests that instruments such as the SF-36 scales may be inappropriate for such comparisons, claiming that they were not intended for use '…in a population of injured workers…' (p. 413). Dembe (2001) advocates the development of standardised methods for data collection in this field. Such modes of data collection are not yet available as evidenced by the use of SF-36 surveys in this field of research (e.g., Hee et al., 2005; Henn et al., 2005; PricewaterhouseCoopers, 2003; Obremsky et al., 2002). Accordingly, this study adopted the SF-36 health and well being scales to compare this sample of Tasmanian workers compensation claimants with the ABS data for the general population of Tasmania.

The eight health and well being scales surveyed by the LTBS and reported by the ABS included information relating to respondents' physical functioning, role limitations due to physical disorders, bodily pain, general health, vitality, social functioning, role limitations due to emotional disorders, and mental health. In these scales, '…a higher score indicates a better state of health or wellbeing' (ABS, 1997b: 4). Table 17 presents a summary of the scales and their meaning (ABS, 1997b).

[4] Source documents are: Australian Bureau of Statistics (1997b) and Australian Bureau of Statistics (2004b).
[5] Refer to: Hee et al. (2001); Henn, Kang, & Green (2005); Obremskey et al. (2002); PricewaterhouseCoopers (2003).

Table 17: Meaning of scaled scores for the ABS National Health Survey

Scale	Zero	100
Physical functioning	Limited a lot in performing all physical activities including bathing or dressing due to health	Performs all types of physical activities including the most vigorous without limitations due to health
Role limitations due to physical disorders	Problems with work or other daily activities as a result of physical health	No problems with work or other daily activities as a result of physical health
Bodily pain	Very severe and extremely limiting pain	No pain or limitations due to pain
General health	Evaluates personal health as poor and believes it is likely to get worse	Evaluates personal health as excellent
Vitality	Feels tired and worn out all the time	Feels full of pep and energy all of the time
Social functioning	Extreme and frequent interference with normal social activities due to physical or emotional problems	Performs normal social activities without interference due to physical or emotional problems
Role limitations due to emotional disorders	Problems with work or other daily activities as a result of emotional problems	No problems with work or other daily activities as a result of emotional problems
Mental health	Feelings of nervousness and depression all of the time	Feels peaceful, happy, calm all of the time

Data collection, scaling, and analysis

To optimise the comparability of ABS population scores the with LTBS scores, the procedures employed by ABS (1997b) for data collection, scaling, and analysis were replicated in this study. Thus, later iterations of SF-36 scaling and analysis contained in version 2.0 of the SF-36 from 1998 were not used in this study (Ware, 2000). There being no ABS data available relating to compensation modes for workers compensation (lump sum or weekly benefits), these disaggregated responses were compared to the aggregated ABS Tasmanian population score. Moreover, one respondent only comprised the 75 and over age group. Consequently, this age group was removed from all analyses. ABS data disaggregated by age was available only for Australia-wide responses, not on a state-by-state basis as with some other data.

Statistical testing of differences between the means of aggregated and disaggregated LTBS scores and relevant ABS Tasmanian population scores for the eight scales of health and well being was carried out using the computer software SPSS. An alpha value of .05 was used for all statistical tests.

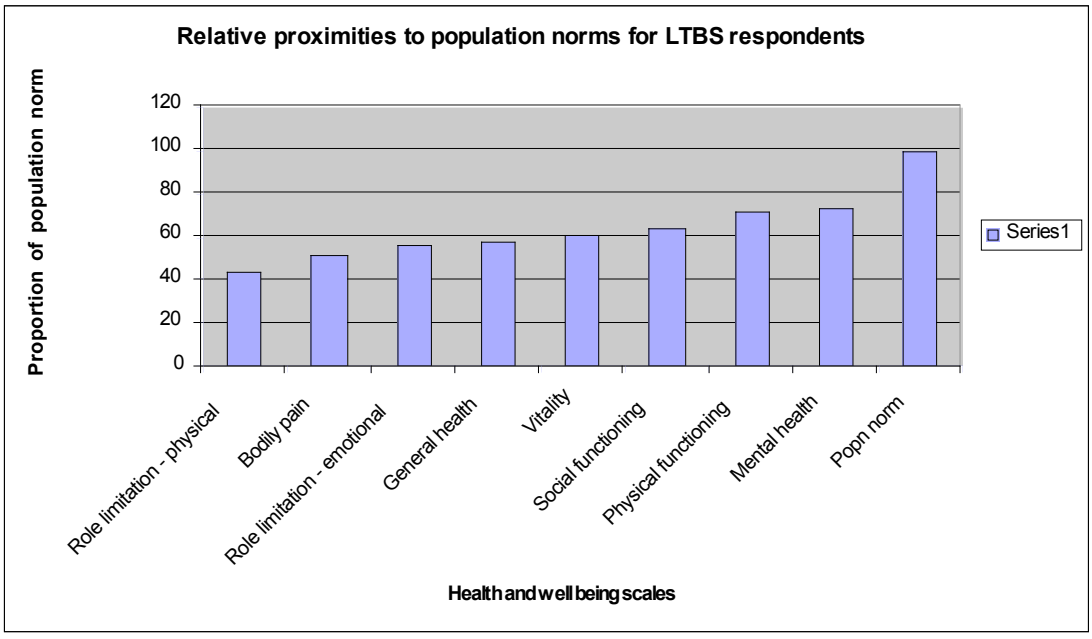
Findings

Overall, LTBS survey data generated lower scores for LTBS respondents compared to the relevant ABS Tasmanian population scores for the eight health and well being scales. Proportionally, the aggregated LTBS respondents' scores were between 40 and 75 per cent of the aggregated ABS Tasmanian population scores, and the magnitude of these lower proportions of ABS Tasmanian population scores persisted throughout disaggregated analyses of the data by sex, compensation mode, and age. Table 18 and Figure 1 present summaries of aggregated data comparing the LTBS population scores with the ABS scores. Further details of frequencies are included in Appendix 1.

Table 18 LTBS scores ranked as percentages of aggregated ABS population scores

Rank	Scale	ABS score	LTBS score	LTBS score as a percentage of ABS score
1	Role limitations due to physical disorder	79.7	35.4	44.4
2	Bodily pain	77.2	39.9	51.7
3	Role limitations due to emotional disorders	85.1	47.4	55.7
4	General health	71.2	40.6	57.0
5	Vitality	64.9	39.7	61.2
6	Social functioning	85.6	54.3	63.4
7	Physical functioning	82.1	58.6	71.4
8	Mental health	77.2	56.3	72.9

Figure 1: LTBS scores ranked as percentages of aggregated ABS population norms



Sex differences

Table 19 and Figure 2 present summaries of data disaggregated by sex.

Table 19: LTBS scores ranked as differences by sex and ABS population data

Rank	Scale	LTBS male respondents' percentage of ABS male population score	LTBS female respondents' percentage of ABS female population score	Percentage points difference
1	Physical functioning	68.0	76.1	8.1*
2	Mental health	72.0	78.4	6.4
3	Bodily pain	49.6	54.8	5.2
4	Role limitations due to physical disorder	43.1	47.5	4.4
6	General health	55.1	58.3	3.2
7	Role limitations due to emotional disorders	55.1	57.8	2.7
7	Social functioning	63.1	64.4	1.3
8	Vitality	61.0	62.3	1.3

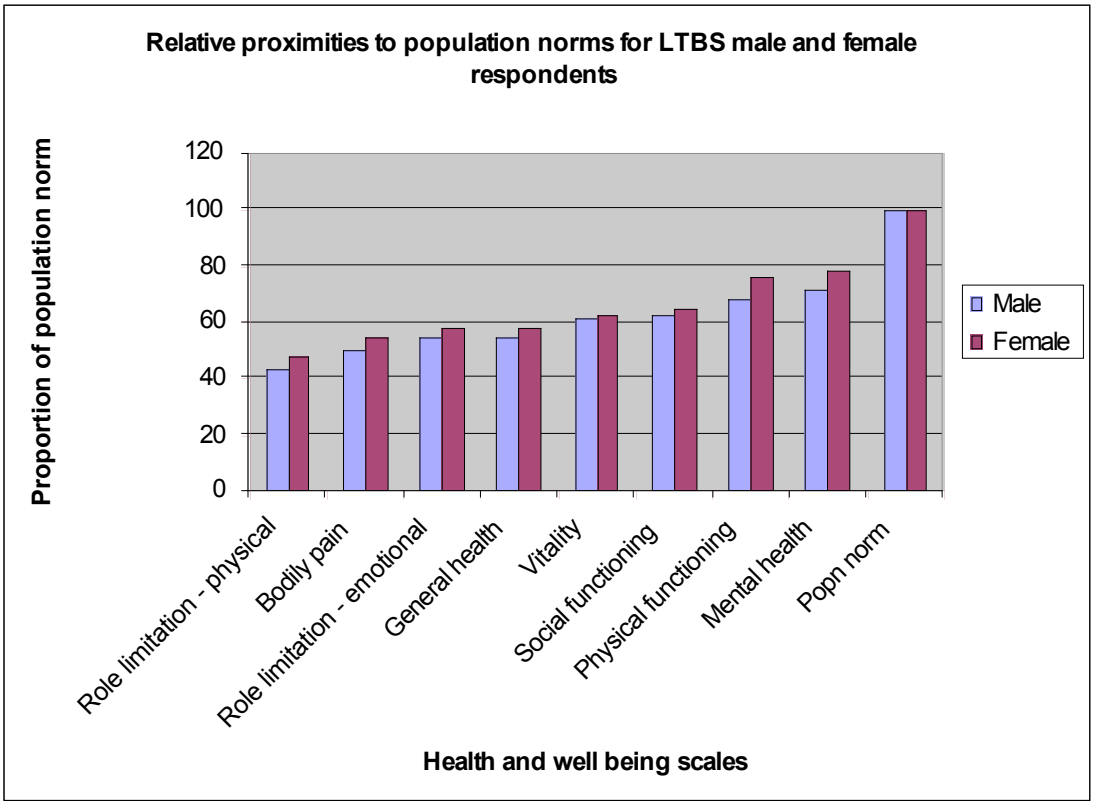
*Statistically significant at the .05 rejection level (t = -.20, df = 491, p = .04)

Commentary

Differences between sexes on health and well being scales were greatest for physical functioning. The differences between males' and females' responses and the ABS population norms were statistically significant for females.[6] Moreover, females' closer proximity to population norms persisted throughout the analyses of these scales. This may indicate that either fewer female respondents suffer as limiting physical injuries as males, or that female respondents better recover their health and well being.

[6] Independent samples t Test

Figure 2: Differences between LTBS and ABS scores by sex



Compensation mode

Table 20 and Figure 3 present summaries of data disaggregated by compensation mode.

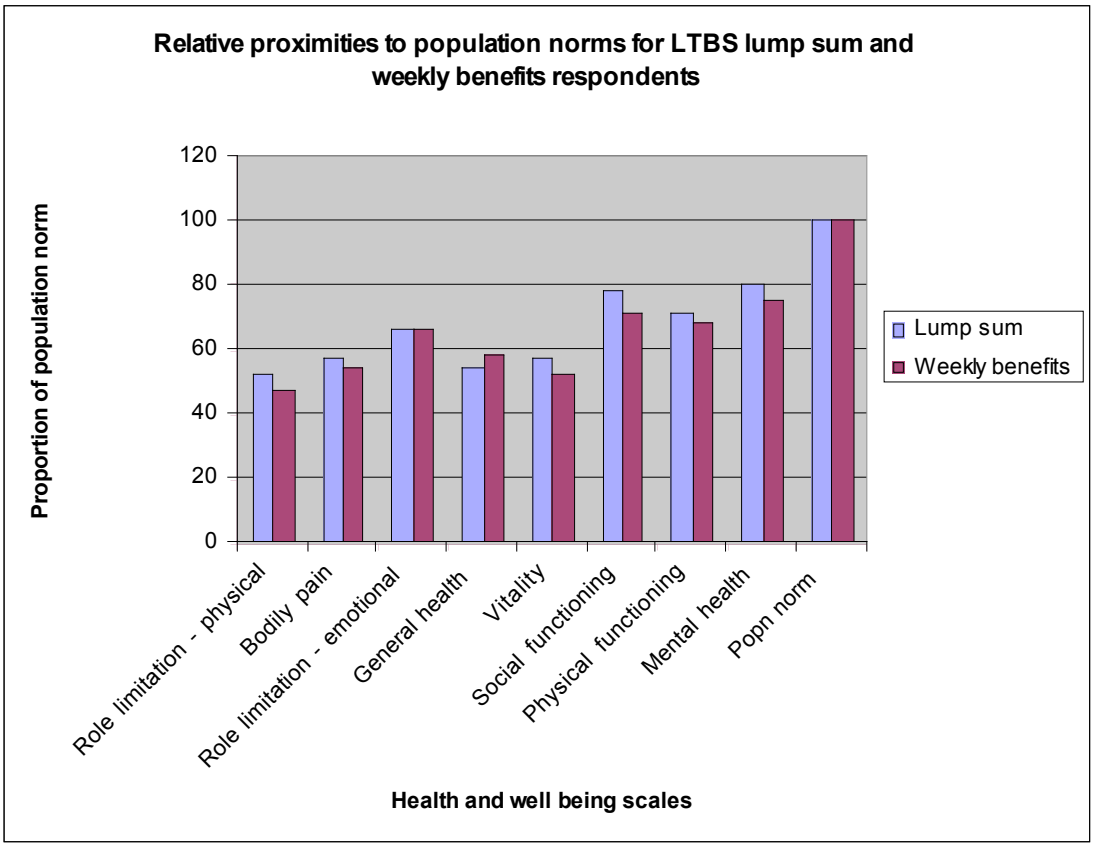
Table 20: Health and well being ranked by differences in compensation mode

Rank	Scale	LTBS lump sum respondents' percentage of ABS population score	LTBS weekly benefits respondents' percentage of ABS population score	Percentage points difference
1	Social functioning	78.5	71.5	7.0
2	Mental health	80.6	75.5	5.1
3	Role limitations due to physical disorder	52.1	47.2	4.9
4	Vitality	57.7	52.8	4.9
5	General health	54.6	58.9	4.3
6	Physical functioning	71.9	68.9	3.0

Table 20 Health and well being ranked by differences in compensation mode (continued)

Rank	Scale	LTBS lump sum respondents' percentage of ABS population score	LTBS weekly benefits respondents' percentage of ABS population score	Percentage points difference
7	Bodily pain	57.2	54.3	2.9
8	Role limitations due to emotional disorders	66.6	66.6	0

Figure 3: Differences between LTBS and ABS scores by compensation mode



Commentary

In all health and well being scales except general health, lump sum respondents' percentage of ABS population scores was greater than weekly benefits respondents, indicating a closer approach to ABS population norms. The greatest differences between compensation modes occurred in the social functioning, mental health, role limitations due to physical health, and the vitality scales. No differences were found to be statistically significant.

Age

Except for mental health, self-reported health status tends to decline with age: older people tend to report poorer health than younger people (ABS, 1997b). Thus, where overall LTBS and ABS scores differ from this pattern it suggests that the difference may be due to a workers compensation claim, e.g., younger-range claimants aged 18-24 years reporting lesser physical functioning than their older-range counterparts.

Summary

Table 21 presents a summary of the foregoing. Details are presented in Appendix 1.

Table 21: Summary of selected samples comparing scaled LTBS population scores with scaled ABS population scores

SF-36 Scale	Sample	Comparison between ABS and LTBS scores	Comment
Physical functioning	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	While ABS respondents' scores declined with age, LTBS respondents aged 25-34 and 45-54 scored higher than their counterparts
Role limitations due to physical disorders	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	While ABS respondents' scores declined with age LTBS respondents aged 18-24 reported markedly lower scores than their older counterparts

Table 21: Summary of selected samples comparing scaled LTBS population scores with scaled ABS population scores (continued)

SF-36 Scale	Sample	Comparison between ABS and LTBS scores	Comment
Bodily pain	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	ABS and LTBS respondents' scores declined generally with age
General health	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	ABS and LTBS respondents' scores declined generally with age

Table 21: Summary of selected samples comparing scaled LTBS population scores with scaled ABS population scores (continued)

SF-36 Scale	Sample	Comparison between ABS and of LTBS scores	Comment
Vitality	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	While ABS respondents' scores declined with age, LTBS respondents' scores showed some increase with age
Social functioning	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	Younger and older ABS and LTBS respondents' scores were higher than their middle-aged counterparts
Role limitations due to emotional disorders	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	ABS and LTBS respondents' scores were lower for younger and older age ranges

Table 21: Summary of selected samples comparing scaled LTBS population scores with scaled ABS population scores (continued)

SF-36 Scale	Sample	Comparison between ABS and LTBS scores	Comment
Mental health	Aggregated	LTBS lower	Statistically significant difference at .05 rejection level
	Disaggregated by sex	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by compensation mode	LTBS lower	Not statistically significant at .05 rejection level
	Disaggregated by age	LTBS lower	Pattern were similar for ABS and LTBS age ranges but LTBS respondents showed markedly greater differences between younger and older age ranges and their middle age range counterparts

Conclusion

All aggregated and disaggregated analyses for these eight scales of health and well being indicate that LTBS respondents are markedly below the ABS Tasmanian population norms. LTBS respondents came closest to closing the gap in relation to their mental health and physical functioning and farthest away in relation to their role limitations due to physical disorders and bodily pain. These findings should be viewed in light of the descriptions of health and well being scales provided in Table 17, however.

While LTBS respondents seem closer to population norms in their physical functioning, that observation must be placed alongside a relatively low capacity for physically coping with work or other daily activities. There may be issues of definition impinging on the collection of these data: responses to items relating to physical functioning were quite specific while those relating to role limitations due to physical disorders were more context-dependent in relation to individuals' interpretation of the item. Hence, these health and well being items may be answered more subjectively.

Shearing sheep or laying bricks, for example, may be the benchmark for one person's view of the extent of their physical disorders impinging on work or other daily activities while for another, more sedentary work or daily activities may be the benchmark. Similarly, items for mental health scale are quite specific while those for bodily pain provide more room for individual interpretation and subjectivism.

Nevertheless, the validity of these comparisons remains, given that the same issues would have been present in the collection of the ABS data in the first place.

Transitional health: Health one year ago and now

Question: Compared to one year ago, how would you rate your health in general now?

Introduction

The usefulness of this survey item may be limited in its application to an injured or ill population (Dembe, 2001). Any LTBS respondent who was injured or ill one year ago or more and has now recovered may well respond with higher ratings given that their health has improved markedly in relative terms. Likewise, LTBS respondents may be suffering ill effects from their injury or illness for more than one year and will respond accordingly. Conversely, ABS respondents who may have not suffered work-related or any other injury and/or illness in the last year may report their current health relative to a higher initial benchmark than LTBS respondents. To minimise these effects in the analyses, data from respondents reporting an injury or illness later than 2005 were removed from the analysis, thus increasing the likelihood of encountering greater temporal stability in respondents' health and well being. Tables 4 and 5 present summaries of these data for males and females by age group.

Findings

Data relating to transitional health were partially aggregated into three responses: Feeling better, Feeling the same, and Feeling worse, by summing the proportions for *Much better now* and *Somewhat better now*, and *Somewhat worse now* and *Much worse now*. Sample sizes for some categories were quite small, e.g., 18-24 year age-ranges male and female, one each; and 65-74 years age-range female, two only. These categories were removed from the summaries. Table 22 presents summaries of data for males and Table 23 presents summaries for females. Details of frequencies are included in Appendix 2

Table 22: Overview of transitional health data for males from LTBS and ABS surveys

Response	Age ranges in years				
	25-34	35-44	45-54	55-64	65-74
Data source			**ABS**		
Feeling better	20.8	17.9	15.5	16.1	12.3
Feeling the same	72.5	73.5	74.1	71.2	71.7
Feeling worse	6.7	8.6	10.4	12.7	16.0
Totals	100.0	100	100	100.0	100.0
Data source			**LTBS**		
Feeling better	0.0	19.5	17.6	11.1	17.7
Feeling the same	91.7	60.7	58.2	58.3	41.2
Feeling worse	8.3	19.8	24.2	30.6	41.1
Totals	100.0	100.0	100.0	100.0	100.0

Commentary
The pattern of self-reported health declining with increasing age (ABS, 1997b) appeared in data from ABS and LTBS respondents. Generally, however, greater proportions of LTBS male respondents reported feeling worse now than one year ago than did their ABS counterparts. Correspondingly, lower proportions of LTBS male respondents reported feeling the same or better than one year ago than did ABS respondents.

Table 23: Overview of transitional health data for females from LTBS and ABS surveys

Response	**Age ranges in years**			
	25-34	35-44	45-54	55-64
Data Source		**ABS**		
Feeling better	26.0	23.8	20.2	18.5
Feeling the same	64.6	68.1	69.8	68.5
Feeling worse	9.4	8.1	10.0	13.0
Totals	100.0	100.0	100.0	100.0
Data source		**LTBS**		
Feeling better	18.2	21.0	17.6	11.1
Feeling the same	63.6	65.9	58.2	58.3
Feeling worse	18.2	13.1	24.2	30.6
Totals	100.0	100.0	100.0	100.0

Commentary
Generally, females reported feeling better in their transitional health than males from either the ABS or the LTBS data. The proportions of LTBS female respondents' feeling better or the same was lower than ABS female respondents were across all age ranges. Conversely, greater proportions of LTBS female respondents reported feeling worse and, together with lower proportions reporting feeling the same or better, indicates that overall health and well being for LTBS female respondents was less than that for ABS female respondents.

Conclusion

Within the limitations noted above in relation to the usefulness of SF-36 transitional health scales for comparative studies of workers compensation claimants (Dembe, 2001), these data show that, generally, LTBS respondents reported worse health now than one year ago when compared with the ABS population data. This should not be interpreted to mean that LTBS respondents did not report any improvement in their health, however, but that in relation to the general population, LTBS respondents' transitional health was worse than their age-range counterparts in the general population.

LTBS and ABS Financial Comparisons

Introduction

Data from the ABS were compared with LTBS responses in relation to individuals' financial capacities (Australian Bureau of Statistics, 2004b). Table 24 presents a summary of ABS and LTBS respondents' capacity to raise $2,000 cash in one week and Table 25 presents a summary of ABS and LTBS respondents' experience of cash flow problems in the last 12 months.

Table 24: Capacity to raise $2,000 within one week

Response	Group	
	Percentage of ABS respondents (n range 736 - 2,925*)	Percentage of LTBS respondents (n = 495)
Yes	83.9	62.4
No	16.1	37.6
Totals	100.0	100.0

*Exact sample sizes are not provided by ABS. The ABS household survey generated data from 15,500 dwellings Australia-wide by interviewing one person aged 18 or more answering on behalf of others in the household. This range estimates the sample size for Tasmania at relative standard errors of 50% to 25% respectively.

Commentary

Compared to ABS respondents, approximately twice the proportion of LTBS respondents reported being unable to raise $2,000 cash for something important within one week. Adjusted for annual consumer price index rises from the time of completion of the ABS data collection in June 2002 to the last completed quarter before the LTBS survey (June 2007) this figure is equivalent to $2,291 (Australian Bureau of Statistics, 2003, 2004a, 2005, 2006, 2007a). Thus, given that $2,000 in June 2007 represents a lesser proportion of wealth than in June 2002, the reality of LTBS respondents' financial situation in June 2007 is likely to be somewhat worse than indicated by these figures.

Table 25: Experienced at least one cash flow problem in last 12 months[7]

Response	Group	
	Percentage of ABS respondents (n range 736 – 2,925*)	Percentage of LTBS respondents (507)
Yes	21.5	41.2
No	78.5	58.8
Totals	100.0	100.0

*Exact sample sizes are not provided by ABS. The ABS household survey generated data from 15,500 dwellings Australia-wide by interviewing one person aged 18 or more answering on behalf of others in the household. This range estimates the sample size for Tasmania at relative standard errors of 50% to 25% respectively.

Commentary

Compared to ABS respondents, approximately twice the proportion of LTBS respondents reported at least one cash flow problem in the last 12 months. The most highly ranked responses indicating cash flow problems were: seeking assistance from friends or family (24%); inability to pay car registration or insurance (22%); and inability to make utilities payments (20%). Amongst the other indicators, pawning or selling something for cash (14%) and being unable to make minimum credit card payments (12%) ranked highest. A relatively low proportion of respondents sought assistance from community organisations (4%).

[7] One cash flow problem means being unable to meet financial commitments for at least one of: utilities payments; mortgage or rent payments; car registration or insurance; minimum payment on credit card; having to pawn or sell something for cash; going without meals; being unable to provide home heating; seeking financial assistance from friends or family; or seeking assistance from community organisations.

SECTION 3: Univariate and Bivariate Analyses

Overview

This section of the report provides a basic description of the experiences of some of the most severely affected Workers Compensation claimants. The survey studied people who had received lump sums or weekly benefits in excess of $20,000, which constitutes the top three percent of all claims. The survey reports their experience of the Workers Compensation process and their financial, health, social, and labour force outcomes.

There are some indications of differences between lump sum and weekly benefit compensation modes. In summary, the initial analysis presented here weekly benefit recipients are more satisfied with the Workers Compensation process than are claimants who received lump sums. However, the multivariate analysis presented earlier in this report suggest that this may be a product of other factors, and not a result of the compensation mode in and of itself. Comparison of the compensation modes is complicated by the legislation changes, which mean that lump sum recipients tend to have made their claim in earlier years than weekly benefit recipients. Thus, outcomes that are likely to change substantially over time, such as claimants' financial position or their rehabilitation from injury, require careful multivariate analysis to make meaningful comparisons between the compensation modes.

The Survey

The study produced 505 completed surveys from people who had made workers compensation claims between 1 July 1999 and 30 June 2007. This included 302 responses from people who had received a lump sum of $20,000 or more and 203 responses from people who had received in excess of $20,000 in weekly payments, but had not received a lump sum payment of any kind.

The Surveyed Claimants

The bulk of respondents reported soft tissue or spinal disc/displacement injuries and anxiety/stress disorders.[8]

People who made claims between 1999 and 2004 were more likely to receive a lump sum than people with claims in 2005 and 2006. People who are older are more likely to receive lump sums and young people are more likely to receive weekly benefits. Women are more likely to receive weekly benefits than a lump sum. People at the lower and upper levels in income are more likely to receive lump sums. People at middle income levels are more likely to receive weekly benefits.

[8] Respondents' reports of their compensation related injury and/or illness were classified according to the injury and/or illness schedule used by WorkCover Tasmania (Tasmania, 2006).

Return to Work

The majority of respondents reported that they had returned to work. Of those returned to work, the majority had less than 12 months away from work following their work related illness and/or injury. Of those not returning to work, the majority reported that they were not yet capable of taking paid employment. A majority of those returning to work did not return to their Pre-injury and/or illness employer.

Return to Work and Compensation Mode

Compared to lump sum recipients, those on weekly benefits are more likely to return to work with the same employer, are more likely to be offered lighter or modified duties, and more likely to be encouraged to return to work. Post injury and/or illness, those who receive a lump sum are more likely to return to work as managers and administrators, tradespersons and related workers, or elementary clerical and sales and service workers. In contrast, those who received weekly benefits are more likely to return to work as professionals and associate professionals.

Insurance Services

A slight majority of respondents were dissatisfied with insurance services providers in relation to their workers compensation claim. Of those respondents offering an additional written comment, 65% felt that they had been treated less than optimally by the insurance services provider. Compared to people who received weekly benefits, lump sum recipients are significantly more likely to be dissatisfied with their interactions with insurers. Lump sum recipients are more likely to report that the found insurance services personnel to be suspicious, contemptuous, or indifferent toward them.

Medical Services

Most respondents reported being satisfied with their general practitioner referred specialist medical services, but fewer were satisfied with their insurer referred specialist medical services. Respondents receiving lump sum payments were more likely to be dissatisfied with their insurer referred medical specialist services. When commenting on their interactions with medical services personnel, lump sum payments recipients were more likely to report that they were treated poorly or that the relationship was motivated by the provider's relationship with the employer or insurer. Weekly benefits recipients were more likely to report positively, although they felt that differing medical opinions confused the issue and that medical personnel lacked understanding of occupational demands placed on them.

Rehabilitation Services

More than half (57%) of all respondents accessed rehabilitation services and approximately half of those did so within 3 months of the injury and/or illness. A majority of respondents reported being satisfied or very satisfied with rehabilitation services. Lump sum payments recipients were more likely to be dissatisfied or very dissatisfied with their rehabilitation services. A majority of respondents reported a lack of proper planning for their rehabilitation program and lump sum recipients were more likely to make such comments.

Legal Services

Most respondents accessed legal services and were satisfied with the outcomes. A small proportion of respondents reported they felt constrained in applying the full extent of their legal entitlements through poor representation, geographical isolation, exhaustion or having to risk more money in taking their action further.

The Tribunal

One third of respondents accessed the rehabilitation and compensation tribunal. Of those that access the tribunal, a majority were satisfied or very satisfied with the outcome. Almost half those commenting on the tribunal thought it was legalistic and adversarial.

Health Outcomes

More than half of all respondents (60%) felt somewhat worse or much worse than they did before their injury and/or illness. The data in this section provide a substantial number of indicators of claimants' self-assessed health. To be properly interpreted it will require careful comparisons with standardised measures of general population health. Initial results suggest that compensation mode does not affect self-assessed health outcomes. However, this result may be unreliable because of the change in legislation, which means that weekly benefit recipients were more likely to have been injured recently. Careful multivariate analysis will be required to interpret these results.

The "Step Downs" in Weekly Benefits

After the first reduction in weekly benefits, nearly half of respondents (49%) reported they were adequately managing or managing quite well. The other half were "barely managing" (44%) or not managing (7%). Following the second weekly benefits reduction, the number of respondents reporting they were adequately managing or managing quite well drops to one third (34%) with nearly half (48%) barely managing and 18% not managing.

Financial Outcomes

The majority of respondents reported being dissatisfied (37%) or very dissatisfied (24%) with their lump sum payment. Approximately 40% of respondents reported being satisfied or very satisfied. A substantial majority (63%) of respondents reported retaining none of their lump sum payment. A smaller proportion (18%) reported retaining less than half and, collectively, these two categories accounted for 81 percent of responses.

With respect to their current financial position, the majority or respondents reported that they were managing quite well or adequately, but one third reported that they were barely managing. The majority of respondents (more than 80%) reported being able to meet their household and related expenses. Twenty percent of respondents reported that they had trouble paying their electricity or telephone bills on time.

People on weekly benefits are nearly twice as likely to report difficulty paying their credit card minimum amount on time. Future analysis will examine if this is related to weekly benefit reductions.

Those on weekly benefits are significantly more likely to report the source of their current income to include their own income compared to lump sum recipients. In contrast, nearly one quarter of lump sum recipients report Centrelink as their primary source of household income compared to just four percent of weekly benefit recipients.

Similar to the health outcomes, compensation mode does not seem to affect financial outcomes. Both compensation modes report significant amounts of financial distress. Although, again, caution is required in interpreting this result due to the complexities in the data created by the legislation change. More sophisticated analysis is required.

Family Life

The majority (53%) of respondents reported worse or much worse family life Post-injury and/or illness. Nearly half of respondents (43%) reported their spouse or partner had changed their labour market activity because of their injury and/or illness. Forty percent of respondents felt that their role within the family has changed for the worse. Two thirds of respondents reported that they had someone to turn to for advice in times of crisis. However, 14% said they never had any one to turn to and 17% said they rarely had someone to turn to. Although all respondents reported significant and negative impacts on their social functioning because of their workplace injury and/or illness these were not differentiated by compensation mode. Both lump sum and weekly recipients were equally likely to report such outcomes.

Workers Compensation Survey: Results

Introduction

This reports details the initial descriptive and bivariate analyses of survey data from Phase 1 of the WorkCover Long Term Benefits Study. The survey was conducted between August -November 2007. In this report, the descriptive results of the key variables are reported as well as the preliminary comparative analyses of these variables against our key dependent variable of workers compensation modes; weekly benefits and lump sums[9]. Multivariate and other more comprehensive analyses of these data will be conducted during 2008.

Sample recruitment

Summary of Sample

The study produced 505 completed surveys from people who had made workers compensation claims between 1 July 1999 and 30 June 2007. This included 305 responses from people who had received a lump sum of $20,000 or more and 200 responses from people who had received in excess of $20,000 in weekly payments, but had not received a lump sum payment of any kind.

The survey's sampling frame was all Tasmania workers compensation claimants whose most recent claim was lodged between 1 July 1999 and 30 June 2007. Of these approximately 60,000 claimants, the 2,231 awarded lump sums of $20,000 or more or had accumulated weekly payments of $20,000 were selected as the research population. Adoption of the $20,000 threshold captured those claimants in the highest three percent of lump sums or weekly payments recipients between 1999 and 2007.

The rationale for selecting the $20,000 threshold for our research population is two-fold. First, receipts of such relatively high levels of compensation suggest a substantial engagement with workers compensation processes. These recipients' experiences are most likely to provide valuable data on items such as their employer's response, and their interaction with insurance, medical, legal, rehabilitation, and dispute resolution services. Second, receipt of this level or higher worker's compensation payments, whether through weekly payment or lump sum award indicate a group of recipients whose health, financial, and social outcomes are likely to be affected by their workers compensation experiences more than claimants with lesser awards or accumulations.

[9] These analyses were performed with the SPSS data analysis computer software. Tests for statistical significance in differences typically take the form of chi-square tests (χ^2) for categorical or nominal data, and t-tests (t) for continuous (interval or ratio) data. A significance level of .05 was used for all tests.

Initial categories of the research population were:

- Sub-sample 1: Those awarded a lump sum of $20,000 after last weekly payment (n = 720)
- Sub-sample 2: Those awarded a lump sum of $20,000 and received no further weekly payments after 31 December 2005 (n = 807)
- Sub-sample 3: Those who received accumulated weekly payments of more than $20,000 and were awarded no lump sum (n = 704)

The Survey Data Collection

These 2,231 claimants were mailed an explanatory letter, one initial, and one follow up survey questionnaire during August and September 2007. All surveys included a postage-page return envelopes and participation was both voluntary and anonymous. By 11 November 2007, 577 questionnaires had been returned. After subtracting withdrawals and returns of undelivered mail, 2,037 deliveries were assumed effective, yielding an apparent response rate of 28 percent. This response rate is comparable with similar surveys such as that conducted by PricewaterhouseCoopers (2003).

These 577 questionnaire responses were further refined by setting aside for this part of the analysis 38 responses containing insufficient detail on key variables. A further 34 responses from those recruited into Phase 3 were also removed leaving a total of 505. Examination of these data by the initial three compensation pathway categories found the numbers in sub-sample 2 (n=49) fell below expectations and its small size limited further analysis. Sub-samples 1 and 2 were therefore amalgamated to form a single category of respondents receiving a lump sum of $20,000 paid after the last weekly payment. As per Table 26 below, our respondent population is now categorised into two compensation pathway sub-samples: *Lump Sum Payments* (n= 305) and *Weekly Benefits* (n = 200). With a 60:40 split between these two sub-samples, these groups provide a clearly differentiated dependent variable for the bivariate analyses.

Table 26: Composition of Respondent Data by Compensation Mode

Compensation modes	Percentage	Number
Sub-sample 1: Lump Sum Payments	60	305
Sub-sample 2: Weekly Benefit	40	200
Total	100	505

Characteristics of the Respondent Population

The following results provide demographic information about the respondent sample in relation to subjects' demographic characteristics and their Pre-injury or illness employment characteristics. To establish the representativeness of this survey's respondent population comparisons of data from this group are made, where practicable, with characteristics of the research population as described earlier.

Summary of Respondent Characteristics

In comparison to the research population (people who were mailed the survey), respondents (people who filled in the survey) tend to:

- be somewhat older
- be female
- have lodged their claims at a later date

These differences will have minor influences on the study, but can be controlled for in the later multivariate analyses.

In relation to injury or illness leading to the compensation claim, the bulk of respondents reported soft tissue or spinal disc/displacement injuries and anxiety/stress disorders.

Age of Respondents

The age of respondents varied from 20 to 75 years, but the median and mean age were similar at 50 and 49.3 years respectively (standard deviation (SD) = 9.6) with approximately 68 percent of respondents aged between 40 years and 59 years. The respondent population (people who filled in the survey) is approximately four years older than the 2,231 claimants in the research population (people who were mailed the survey). The mean and median age of this group was around 46 years (SD = 10.4). Therefore, individuals in the respondent sample were more likely to be older than the research population by an average of 3.1 years. This difference in ages between the research and the respondent population's ages is statistically significant ($t = 6.818$, $df = 554$, $p = .00$). However, its magnitude is still relatively small and is not expected to substantially influence most analyses. Age differentials will also be accounted for within the later multivariate analysis.

Sex of Respondents

Respondents were divided by sex with 59 percent being male and 41 percent being female. Compared to the research population (males = 63 percent; females = 37 percent) this sex distribution is slightly biased towards females. Again, while this difference is statistically significant ($\chi^2 = 5.261$, $df = 1$, $p = .02$) its magnitude is small and will be adjusted for within the multivariate analysis.

Table 27: Distribution of mailed surveys by claim year and compensation mode

Claim year	Lump sum claimants	Weekly benefits claimants	Total
1999	202	14	216
2000	421	41	462
2001	319	60	379
2002	241	67	308
2003	179	72	251

Table 27: Distribution of mailed surveys by claim year and compensation mode (continued)

Claim year	Lump sum claimants	Weekly benefits claimants	Total
2004	101	130	231
2005	59	166	225
2006	5	154	159
Totals	1527	704	2231

Commentary

Greater numbers of lump sum claimants were included in the research population (n = 1,527) than weekly benefits claimants (n = 704). It is notable that the numbers of lump sum claimants tended to reduce year by year over the period 2000-2006 while weekly benefits claimants' numbers tended to increase year by year over the period 1999-2005. It was found more likely that lump sum claimants' claim year would be in the period 1999-2003 and weekly benefits claimants' claim year would be in the period 2004-2006 ($\chi^2 = 795.962$, $df = 7$, $p = .00$).

Table 28: Returned mail by claim year period and compensation mode

Claim year period	Lump sum claimants	Weekly benefits claimants	Total
1999-2002	182	23	205
2003-2006	28	30	58
Totals	210	53	263

Some mailed questionnaires were returned and found to be untraceable (11%, n = 248) or traced and readdressed (9%, n = 210). Some were returned from the changed address (0.7%, n = 15). Thus, 12% (n =263) of questionnaires were assumed to have not reached the addressee. Of this group, it more likely that mail would be returned from lump sum claimants whose claim year was in the period 1999-2002 and that mail would be returned from weekly benefits claimants whose claim was in the period 2003-2006 ($\chi^2 = 46.095$, $df = 1$, $p = .00$). This pattern conforms to the greater numbers of lump sum claims made 1999-2002 (lump sum n = 1,183, weekly benefits n = 182) and weekly benefits claims made 2003-2006 (weekly benefits n = 522, lump sum n = 344) summarised in Table 33.

A similar pattern applied for withdrawals from the study (1.4%, n = 31), with more lump sum claimants from the period 1999-2002 tending to withdraw (61%, n = 19). These differences were not statistically significant.

Year of Claim

Table 28: Year of Claim

Claim year	Research population (mail contact)	Returned questionnaires		Withdrawals & returned mail		Assumed response rates by year	
		Frequency	Percentage	Frequency	Percentage	Assumed receipt (mail contact less returned mail)	Response rate by year (percentage)
1999*	216	20	5	43	15	173	12
2000	462	51	12	82	28	380	13
2001	379	50	12	62	21	317	16
2002	308	58	14	39	13	269	22
2003	251	57	14	26	9	225	25
2004	231	56	13	21	7	210	27
2005	225	64	15	19	6	206	31
2006	159	66	16	2	1	157	42
Total	2231	422**	100	294	100	1,937	24

*data from half year only

**422 of 505 respondents supplied information about their claim year and sufficient information about key variables to be included in this part of the study

Given information from 422 respondents who provided their claim years, it is likely that claimants' accessibility and willingness to participate affected the overall response rate and its year-by-year patterns. As seen in Table 28 above, the numbers of returned questionnaires by claim year tends to increase between 2000 and 2006, indicating that more respondents with recent claims are present in the study. Partly, at least, this may be due to the smaller proportions of mail returned from claims originating in the later years, and the larger proportions returned to sender mail relating to claims originating in the earlier years of the period.

This pattern may be indicative of out of date contact information for earlier claims and follow-up investigation through electoral rolls tends to confirm this. No trace was found for a greater proportion of claimants from the earlier years than the later years e.g., 77 percent of returned mail was not traceable for the years 1999-2002 while 23 percent of returned mail was not traceable for the years 2003-2006. Moreover, returned mail proportions for claimants traced to changed addresses was greater in the earlier years than the later years of the period e.g., 87 percent for 1999-2002 and 13 percent for 2003-2006. This pattern was replicated for the relatively small number of withdrawals from the study: 68 percent of these withdrew with claims from the years 1999-2002 and 32 percent of these withdrew with claims from the years 2003-2006. Thus, it appears that accessibility and willingness to participate

were factors determining the year-by-year pattern of responses in the respondent sample.

Type of work-related injury and/or illness

Respondents' reports of their compensation related injury and/or illness were classified according to the injury and/or illness schedule used by WorkCover (Tasmania, 2006). As shown in Table 29, the three most frequently reported injuries/illnesses were soft tissue injuries disc displacement prolapse, degeneration or hernia, and anxiety/stress disorders. Collectively, these three categories of work related injury and/or illness accounted for 75 percent of all injuries and/or illnesses reported in this survey. Later reports will make a more detailed comparison of these injuries and those reported in other WorkCover data.

Table 29: Injuries reported by LTBS Respondents

Injury and/or illness type	Number	Percentage
Soft tissue injuries, e.g., sprains, strains	182	37
Fractures (excluding skull, facial bones, teeth & vertebral column)	57	12
Anxiety/stress disorder	84	17
Laceration or open wound	11	2
Contusion, bruising or superficial crushing	16	3
Disc displacement, prolapse, degeneration or hernia	99	20
Other injuries/illnesses/diseases not listed above	41	8
Totals	490	*99

*rounding errors are present

Education and Occupation

The greatest proportion of respondents were without post-school qualification. As shown in Table 30, this educational pattern was reflected in the occupational data. Intermediate production and transport workers made up one fifth of respondents, followed by labourers and related workers and tradespersons and related workers both forming another 16 percent of the total. Collectively, these occupational categories account for 52 percent of the respondent population.

Table 30: Education Level and Occupational Classifications of Respondents

Variable	Frequency n=505	Percentage
Education		
Bachelor degree or higher	55	11
Trade qualification	71	14
No post-compulsory school qualification	211	42
Other qualification[10]	180	35
Occupational group[11]		
Managers and administrators	31	6
Professionals	67	13
Associate professionals	46	9
Tradespersons and related workers	79	16
Advanced clerical and service workers	10	2
Intermediate clerical, sales and service workers	56	11
Intermediate production and transport workers	101	20
Elementary clerical, sales and service workers	27	5
Labourers and related workers	81	16
Occupation not stated or indeterminate	7	2

.

Circumstances of Pre- injury and/or illness Employment

The following section reports the results of respondents' Pre-injury and/or illness employment circumstances.

Respondents worked a wide range (4-84 hours per week) of hours in their Pre-injury and/or illness employment. The average number of hours worked per week was 40.7

[10] Those reporting other qualification included senior secondary (11 percent), vocational certificates I or II (5 percent), associate diploma or diploma (7 percent), vocational certificate IV (4 percent), and miscellaneous qualifications such as hospital-trained nurse with single or multiple certificates, qualifications from insurance and banking institutes, and post-graduate degrees such as masters and doctorates.

[11] These data were compiled from respondents' Pre-injury and/or illness job titles and data collected about respondents' education levels aligned with the Australian Standard Classification of Occupations 2nd Edition (Australian Bureau of Statistics, 1997a)

(SD = 12.0). A majority of respondents reported job tenure of two years or more (78 percent) and satisfaction with their Pre-injury and/or illness job (85 percent).

As can be seen from Table 31, the bulk of respondents (47 percent) earned between $20, 800 and $41,600 per annum Pre-injury and/or illness and 23 percent were earning more than $52,000 per annum.

Table 31: Income distribution of Pre-injury and/or illness respondents

Income range ($)	Frequency	Percentage
0 to less than 10,400	10	2
10,400 to less than 20,800	51	10
20,800 to less than 31,200	111	23
31,200 to less than 41,600	118	24
41,600 to less than 52,000	87	18
52,000 to less than 78,000	94	19
78,000 or more	19	4
Totals	490	100

* In relation to annual income, categories are aligned with the Australian Bureau of Statistics income categories (Australian Bureau of Statistics, 2007b).

Respondent Characteristics by Compensation Mode

Summary

People who made claims between 1999 and 2004 are more likely to receive a lump sum (as expected due to legislation changes).

People who are older are more likely to receive lump sums and young people are more likely to receive weekly benefits.

Women are more likely to receive weekly benefits than a lump sum.

People at the lower and upper levels in income are more likely to receive lump sums. People at middle income levels are more likely to receive weekly benefits.

Lump sum recipients have lower Post-injury and/or illness incomes in comparison to the incomes of people on weekly benefits. More analysis of this result is required as it may reflect the influence of other factors.

The following section reports the comparative results of respondents from each of the two primary modes of workers compensation: *lump sum payments* or *weekly benefits*. Data from these two categories are analysed across a range of respondents demographic and work related variables. Only those where a statistically significantly relationship was found between the compensation mode and the respondent characteristics are reported here.

Demographic Characteristics and Compensation Mode

Age and Compensation Mode

Although the pattern has some variations, older respondents are more likely to have received a lump sum than weekly benefits. Table 32 presents a summary of these data.

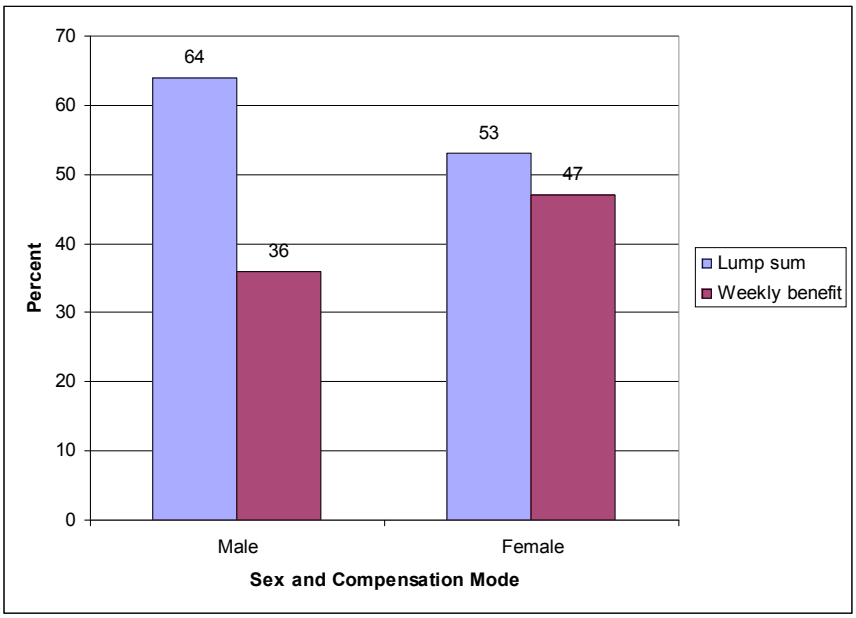
Table 32: Age and Compensation Mode

		Compensation Mode	
Age Range in Years		Lump sum payments	Weekly benefits
		Percentage	Percentage
20 – 35	(n = 40)	60	40
36 – 45	(n = 123)	51	49
46 – 55	(n = 193)	59	41
56 – 65	(n = 126)	67	33
66 and over	(n = 17)	82	18

($\chi^2 = 10.429$, $df = 4$, $p = .03$, n = 499)

There are also differences between the compensation modes of men and women. As depicted in Figure1, both male and females were more likely to have received a lump sum than weekly benefits, but female respondents were less likely to receive a lump sum payment than male respondents. This difference is likely to be influenced by other gender-related factors such as work and occupational patterns and types of injuries/illnesses. The later multivariate analysis will provide a more comprehensive analysis of any gender-specific influences in relation to compensation pathways.

Figure 4: Sex and Compensation Mode



($\chi^2 = 4.425$, $df = 1$, $p = .04$, n = 498)

Lump sum payments are also more likely for respondents with an earlier settlement date than those with later dates. Between 1999 and 2004 the majority of respondents reported lump sum payment settlements but, since 2005, the majority of respondents reported weekly benefits settlements. Table 33 presents a summary of these results. This pattern is expected given changes in legislation over that the period under consideration. This pattern may also have significant influences on many of the other bivariate analyses in this report.

Table 33 Year of claim and compensation mode

	Compensation Mode	
Claim Year	Lump Sum	Weekly Benefits
	Percentage	Percentage
1999 (n = 20)*	90	10
2000 (n = 51)	92	8
2001 (n = 50)	86	14
2002 (n = 58)	83	17
2003 (n = 57)	72	28
2004 (n = 56)	66	34
2005 (n = 64)	28	72
2006 (n = 66)	15	85

*half year ($\chi 2 = 144.734$, df = 7, p = .00, n = 422)

Annual Income Pre and Post-injury and/or illness and Compensation mode

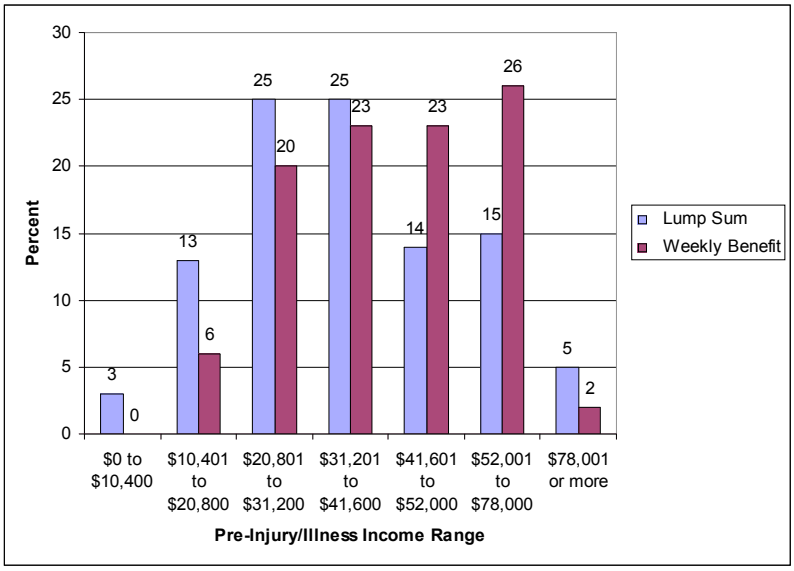
The following section examines respondents reported pre- and Post-injury and/or illness incomes by compensation mode. While the patterns apparent in these results are quite clear, the data itself cannot be directly compared as fewer subjects responded to the item about Post-injury illness incomes because some had not returned to work. Later analyses will directly correlate pre and post injury and/or illness income for those respondents who have returned to work.

Pre-injury and/or illness Income and Compensation Mode

As depicted in Figure 5 below, those in the lower and upper levels of the Pre-injury and/or illness income distribution were more likely to receive a lump sum payment. By contrast, those in the intermediate income levels were more likely to receive weekly benefits. These data suggest that those in lower paid employment are more likely to receive a lump sum payment. This interpretation is complicated by the different years of the reported Pre-injury and/or illness income, however, which means that the inflation effects of those who claimed workers compensation earlier

may slightly bias the results. Further analysis will be required to take this possibility into account.

Figure 5: Pre-injury and/or Illness Income and Compensation Mode

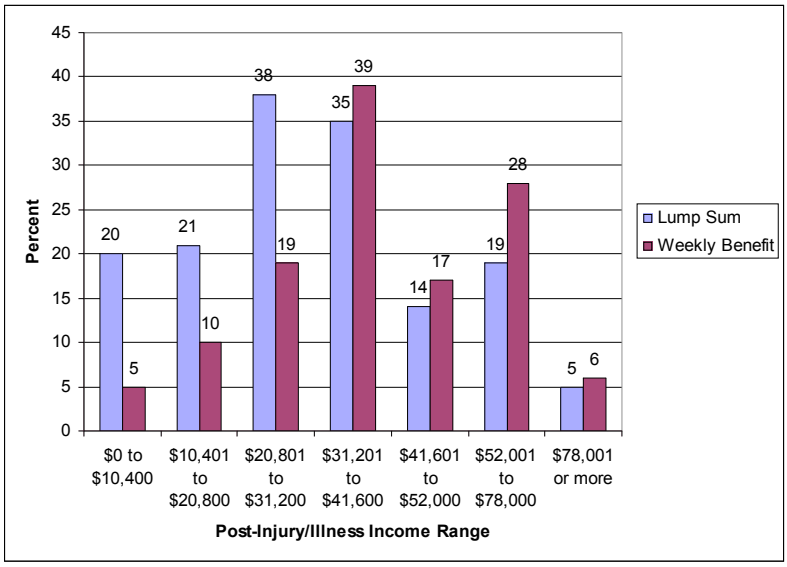


($\chi 2 = 29.967$, df = 6, p = .00, n = 490)

Post-injury and/or illness Annual Income and Compensation Mode

The Post-injury and/or illness income distribution by compensation mode differs from that of the Pre-injury and/or illness income. Those with lower Post-injury and/or illness income ranges are significantly more likely to have received a lump sum payment with this clustering effect most marked in the lower three income ranges. The Post-injury and/or illness income distribution of weekly benefits recipients occur in the middle to upper ranges. Although it seems that those with a compensation mode of weekly benefits fare better in Post-injury and/or illness income terms, the interpretation of these patterns is again complicated by the presence of other possible relevant factors such as type of injury, education level, and age. The later multivariate analysis will control for these factors.

Figure 6: Post-injury and/or illness Annual Income and Compensation Mode*



($\chi 2 = 18.351$, df = 6, p = .001, n = 276)

* Fewer responses reported on Post-injury illness incomes because some had not returned to work.

Post-injury and/or illness Experiences of Workers Compensation Processes

These data quantify the Post-injury and/or illness experiences of respondents as they encountered the various facets of workers compensation processes. Typically, a workers compensation claimant's first engagement with the workers compensation process is that of the Post-injury and/or illness relationship with the employer. Concurrently a relationship with an insurer will begin, and access to medical services. Rehabilitation services may also begin, sometimes followed by legal services. Finally, if necessary, dispute resolution services may be accessed.

Relationships with Employers

Summary

A number of factors relating to Post-injury and/or illness relationships and return to work issues are reported here. Among the more prominent are:

The majority of respondents reported that they had returned to work

Of those returned to work, the majority had less than 12 months away from work following their work related illness and/or injury

Of those not returning to work, the majority reported that they were not yet capable of taking paid employment

On return to work, Pre-injury and/or illness representation in all occupational classifications remained constant, except for advanced clerical and service workers who increased their share of the responses compared to Pre-injury and/or illness levels and labourers and related workers whose share declined.

It was more likely that respondents reduced their hours of work Post-injury and/or illness compared to their Pre-injury and/or illness levels

A majority of those returning to work did not return to their Pre-injury and/or illness employer

Time Away from Work Post-injury and/or illness

Information about time away from work Post-injury and/or illness was provided by 492 respondents. Among those who had returned to work, 58 percent (n = 233) of subjects had up to 12 months time off work Post-injury and/or illness. A further 25 percent (n = 99) were away from work for 12 months to 2 years, and the remaining 35 percent (n = 160) were absent for 2 years to 5 years or more.

Employer Assistance or Encouragement in Making the Return to Work

These actions included being offered lighter or modified duties, offers of help in returning to work, offers of encouragement to return to work, and having employer contact while away from work.

Table 34 presents a summary of these data.

Table 34: Assistance or Encouragement in Returning to Work

TYPE OF ASSISTANCE OR ENCOURAGEMENT (N = 505)	POSITIVE RESPONSES (PERCENT)
Offered lighter or modified duties	77
Offered help in returning to work	53
Offered encouragement to return to work	45
Employer contact while away from work	52

While three quarters of respondents were offered lighter or modified duties, only approximately one half of respondents were contacted while they were away from work and offered encouragement or help in returning to work.

Table 35: Comments about Post- Injury and/or illness Relationships with Employers

Comment	Percentage
No contact from employer	9
Treated suspiciously	11
Treated uncaringly	27
Employer refused or reluctant to acknowledge their responsibilities	13
Employer focused on forcing resignation or retirement	9

Suitable alternative work not available or not offered	7
Employer supportive generally	13
Employer very supportive and made every effort to maintain workplace connections	5
Other interactions not listed above	6
Totals	100

Table 35 lists respondents' comments about their Post-injury and/or illness relationships with their employer. Over half of those responding to this item reported negative feelings about their post-injury and/or illness relationship with their employer. The majority of these respondents felt that they were treated uncaringly or suspiciously, or felt that their employer was trying to evade the issue or force them out of employment. Conversely, some respondents reported feeling that their employer acted as well as could be expected in the circumstances.

Return to work

A minority of respondents reported that they had not yet returned to work (35 percent, n = 180). Of these, 82 percent (n = 148) reported that they were not yet capable of undertaking a paid job and 18 percent (n = 32) reported that they had not yet found a suitable job.

Return to work and occupational classification

Table 36 presents a summary of information from 283 respondents relating to their return to work occupational classification.

Table 36: Pre- and Post-injury and/or illness Occupational Classifications

Occupational classification	Occupation at time of injury Percentage (n=505)	Return to work occupation Percentage (n = 283)
Managers and administrators	6	8
Professionals	13	13
Associate professionals	9	11
Tradespersons and related workers	16	17
Advanced clerical and service workers	2	4
Intermediate clerical, sales and service workers	11	13
Intermediate production and transport workers	20	19

Elementary clerical, sales and service workers	5	8
Labourers and related workers	16	7
Total	100	100

The most striking aspect of these data is their comparative stability pre-to Post-injury and/or illness: six of the nine classifications were virtually unchanged. Of those that changed appreciably from pre- to Post-injury and/or illness, the proportion of advanced clerical and service workers doubled and there was a 60 percent increase in the proportion of elementary clerical, sales and service workers. Meanwhile, the proportion of those classified as that of labourers and related workers more than halved. Perhaps these subjects are under- or over-represented in the not yet returned to work group discussed above. This inquiry could form a future investigation through multivariate analyses.

Return to work and Post-injury and/or illness hours worked

Information about return to work weekly hours was provided by 301 respondents. These weekly hours worked ranged from 2 to 100 with a mean of 32.5 hours and a standard deviation of 14.7 hours. Thus, approximately 68 percent of respondents worked between 18 and 47 hours per week Post-injury and/or illness compared to 29 to 53 hours per week Pre-injury and/or illness. This difference was statistically significant (t = 10.551, df = 300, p = .00). Therefore, despite the greater range of hours worked, respondents were more likely to work fewer hours on return to work.

Returned to work with Pre-injury and/or illness employer

The majority of respondents answering this question (n = 459) reported not returning to work with the same employer (62 percent, n = 312). Table 37 presents a summary of reasons for not returning to work with the same employer.

Table 37: Reasons for not returning to work with the same employer

Reason	Percentage (n = 312)
Still injured and/or ill	38
Involuntarily changed workforce status through retrenchment, closure of employing business, unavailability of suitable work, or feeling forced into retirement or resignation	33
Paid out	14
Voluntarily changed workforce status through resignation, retirement, or return to study	10
Other reasons such as loss of faith and trust in the employer, feeling harassed in the workplace, and feeling no longer valued in the	5

workplace	
Totals	100

Relationships with Employers by Compensation Mode

Summary

Compared to lump sum recipients, those on weekly benefits are more likely to return to work with the same employer, are more likely to be offered lighter or modified duties, and more likely to be encouraged to return to work.

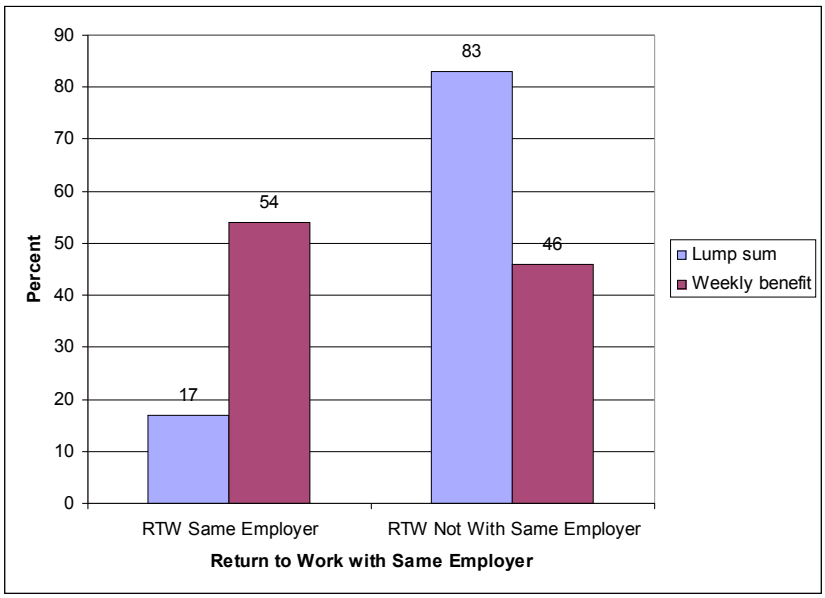
Post injury and/or illness, those who receive a lump sum are more likely to return to work as managers and administrators, tradespersons and related workers, or elementary clerical and sales and service workers. In contrast, those who received weekly benefits are more likely to return to work as professionals and associate professionals.

Employment Circumstances

There were no significant statistical differences in the time spent away from work due to their injury and/or illness between lump sum and weekly benefit mode respondents. The majority of both groups had returned to work at the time of the survey and 51 percent of respondents were away from work between 6 months and two years. Only around 14 percent (n=68) were away from work longer than 2 years.

Significant differences were found, however, where respondents returned to work. As shown in Figure 7 below, weekly benefit respondents were far more likely to return to work with the same employer than were lump sum respondents. Nearly two thirds of lump sum recipients were not working with the same employer. While a number of factors may be influential here, this result initially suggests that weekly benefit receipt is related to an injured/ill worker remaining within the same workplace.

Figure 7: Return to Work With Same Employer by Compensation Mode



(χ^2 = 68.108, *df* =1, *p* = .00, n = 459)

Table 38 lists reasons given for not returning to work with the same employer by compensation mode. The most obvious difference is between lump sum recipients and weekly benefits recipients being paid out. No weekly benefits recipients reported being paid out. Other differences occurred between compensation modes in relation to making a voluntary change in workforce status and being still injured. These differences were statistically significant.

Table 38: Reasons for Not Returning to Work with the Same Employer by Compensation Mode

Response	Compensation mode	
	Lump sum payments	Weekly benefits
Still injured, recurrence of injury or new injury (n = 119)	61	67
Voluntary change in workforce status, e.g., resigned, retired, studying (n = 30)	80	20
Involuntary change in workforce status, e.g., retrenched, employing business closed, no work available, forced retirement or resignation (n = 104)	72	28
Paid out (n = 43)	100	0
Other reasons not listed above (n = 16)	69	31

($\chi^2 = 25.622$, $df = 4$, $p = .00$, n = 312)

Employer Assistance or Encouragement in Returning to Work by Compensation Mode

Table 39 makes clear that people on weekly benefits are significantly more likely to be offered lighter or modified duties than respondents who had received a lump sum. Only 55 percent of those who received a lump sum were offered lighter or modified duties, whereas 67 percent of those who received weekly benefits were offered lighter or modified duties. Consistent with this trend, data summarized Table 40 demonstrates that people who had received a lump sum were much more likely to report that they had received no encouragement to return to work.

Table 39: Offered Lighter or Modified Duties

Response	**Compensation mode**	
	Lump sum payments Percentage (n=305)	Weekly benefits Percentage (n=200)
Yes	55	67
No	45	33
Totals	100	100

($\chi^2 = 6.698$, $df = 1$, $p = .01$, n = 505)

Table 40: Offered Encouragement to Return to Work

Response	Compensation mode	
	Lump sum payments Percentage (n=304)	Weekly benefits Percentage (n=200)
Yes (n = 175)	29	44
No (n = 329)	71	56
Totals	100	100

($\chi^2 = 12.592$, $df = 1$, $p = .00$, n = 505)

Return To Work Occupational Classification and Compensation Mode

Post-injury and/or illness, lump sum recipients were more likely to be employed as managers, and administrators, tradespersons and related workers, and as elementary clerical, sales and service workers. Weekly benefits recipients were more likely to be employed Post-injury and/or illness as professionals and associate professionals

Table 41: Post-injury and/or illness Employment by Compensation Mode

Occupational classification	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=158)	Percentage (n=125)
Managers and Administrators	9	6
Professionals	8	20
Associate Professionals	8	14
Tradespersons and Related Workers	20	14
Advanced Clerical, Sales and Service Workers	4	4
Intermediate Clerical, Sales and Service	13	13
Intermediate Production and Transport Workers	20	19
Elementary Clerical, Sales and Service Workers	11	8
Labourers and Related Workers	7	7
Totals	100	100

($\chi^2 = 16.500$, $df = 8$, $p = .04$, n = 283)

Insurance Services Providers

Summary

A slight majority of respondents were dissatisfied with insurance services providers in relation to their workers compensation claim

Of those respondents offering a comment, 65 percent felt that they had been treated less than optimally by the insurance services provider

A minority of respondents reported positive interactions with their insurance services provider

Compared to people who received weekly benefits, lump sum recipients are significantly more likely to be dissatisfied with their interactions with insurers.

Lump sum recipients are more likely to report that they found insurance services personnel to be suspicious, contemptuous or indifferent toward them.

Self-Insured or Commercially Insured Employment

Respondents were asked to distinguish whether their compensation claim was associated with a self-insured employer (a list of self-insuring company names was provided) or a commercially insured employer. This distinction recognises that those with self-insured employers may consult another person in the organisation in relation to their workers compensation claim, whereas those whose employers are commercially insured may consult directly with insurance company personnel. In the first instance, the insurance claims process may appear indistinguishable from other human resources activities in the organisation, while in the latter the difference may be more apparent.

These items were confusing for some respondents. Some answered *Yes* to having both a self-insured employer and a commercially insured employer, while some answered *No* to both items. These responses were excluded from the analysis. Overall, 16 percent (n = 77) answered *Yes* to the item relating to employer self-insurance, and 40 percent (n = 203) answered *Yes* to the item relating to commercially insured employers. Thus, from these data it appears that 15 percent (n = 77) of all respondents (n = 505) indicated being employed by a self-insured employer and 40 percent (n = 203) indicated being employed by a commercially insured employer.

Post-injury and/or illness Interaction with Insurance Services Providers

Of the 291 respondents expressing their satisfaction or otherwise with insurance services providers, 55 percent (n = 160) indicated that they were dissatisfied or very dissatisfied. Conversely, 45 percent (n = 131) reported that they were satisfied or very satisfied with insurance services providers.

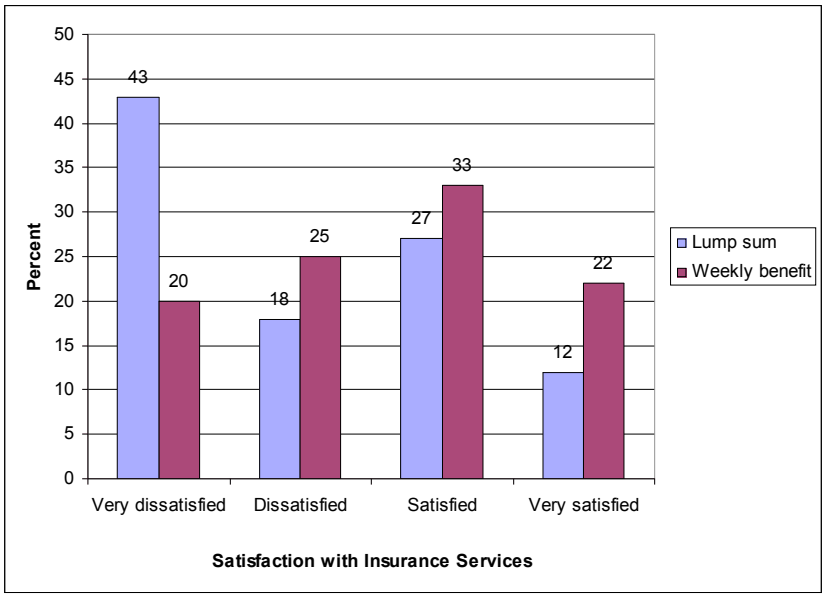
When asked to comment about their views, 133 subjects responded. Of these responses, 79 percent (n = 105) reported negatively, indicating that they had been met with suspicion, contempt or indifference, or had found the insurance services provider unsupportive, slow or limited in their response. Of the remainder, 12 percent (n = 16) found the insurance services provider helpful and willing to assist or sought to promote settlement of the claim. Another 9 percent (n = 12) reported other

interactions such as liaising between the employer and the insurance provider making the claim process more stressful, seeing initial concern evaporate as the claim proceeded upwards through the hierarchy, or feeling the process lacked independence when dealing with a self-insured employer.

Insurance Services Providers and Compensation Modes

While the majority of the respondent population reported dissatisfaction with their interaction with their workers compensation insurer, the level of dissatisfaction varied strongly by compensation mode. As shown in Figure 5 below, lump sum respondents were more likely to very dissatisfied (43 percent) with nearly two thirds reporting dissatisfaction overall. Conversely, weekly benefit respondents report significantly higher levels of satisfaction, with more than half (55 percent) reporting they were very satisfied or satisfied with their insurer interaction. These differences are statistically significant.

Figure 8: Satisfaction with Insurance Services by Compensation Mode



($\chi^2 = 17.071$, $df = 3$, $p = .00$, n = 291)

Comments about Respondents' Satisfaction with Insurance Serves by Compensation Mode

Lump sum payments recipients are more likely to report suspicion, contempt or indifferent responses from insurance services providers and weekly benefits recipients are more likely to report that insurance services providers were helpful and willing to assist. These differences were statistically significant ($\chi^2 = 9.736$, $df = 4$, $p = .05$, $V = .271$, n = 133).

Medical Services Providers

Summary

Almost all respondents reported accessing medical services in relation to their work related injury and/or illness.

Most respondents reported being satisfied with their general practitioner referred specialist medical services, but fewer were satisfied with their insurer referred specialist medical services.

Respondents receiving lump sum payments were more likely to be dissatisfied with their insurer referred medical specialist services.

When commenting on their interactions with medical services personnel, lump sum payments recipients were more likely to report that they were treated poorly or that the relationship was motivated by the provider's relationship with the employer or insurer.

Weekly benefits recipients were more likely to report positively, although they felt that differing medical opinions confused the issue and that medical personnel lacked understanding of occupational demands placed on them.

Following interaction with insurance services providers, respondents were likely to be involved next in accessing medical services. In some instances, medical services would have proceeded concurrently with insurance services. It is recognised that for some respondents, the circumstances of their injury and/or illness may have limited their capacity to make choices about medical services providers. This would apply particularly in instances where the injury and/or illness required emergency medical treatment. Nevertheless, the sequence of access to medical services assumed here is a consultation with a general practitioner (G.P.), referral to a medical specialist by the G.P., and subsequent referral to a medical specialist by the insurer.

Accessing Medical Services

Of the 505 respondents in this sample, 99.6 percent (n = 503) reporting accessing medical services following their injury and/or illness. Two respondents did not answer this item.

Kind of Medical Services Accessed

a) Usual general practitioner: 77 percent (n = 389) of respondents consulted their usual general practitioner

b) Another general practitioner: 27 percent (n = 135) of respondents consulted another general practitioner

c) G.P. referred specialist: 71 percent of respondents consulted a G.P.-referred specialist

d) Insurer-referred specialist: 76 percent of respondents consulted an insurer-referred specialist

Satisfaction with G.P.-Referred Special Medical Services

Of 420 responses, 20 percent (n = 82) were dissatisfied or very dissatisfied with their G.P.-referred medical specialist services and 80 percent (n = 338) were satisfied or very satisfied.

Satisfaction with Insurer-Referred Medical Specialist Services

Of 419 responses, 51 percent (n = 214) were dissatisfied or very dissatisfied with insurer referred specialist medical services and 49 percent (n = 205) were satisfied or very satisfied.

Comments about Medical Services

Table 42 presents a summary of these data.

Table 42: Comments about Medical Services

Comment	Percentage
Treated poorly e.g., rudely, contemptuously, arrogantly	24
Medical practitioner appeared motivated by relationship with the insurer and/or employer	26
Differing medical opinions confused the issue	15
Return to work proposals lacked understanding of my occupational demands	4
Generally positive and beneficial	16
Very positive, promoted resolution of the medical aspects of the matter	6
Other interactions such as not being taken seriously, just another workers compensation case, feeling disempowered by not having access to medical reports, and finding the relationship intimidating, intrusive, and judgmental.	9
Total	100

Half of all respondents (n = 135) reported that their relationship with their medical services provider was marked by rudeness, contempt, or arrogance or appeared motivated by the provider's relationship with the employer and/or insurer, while 22 percent (n = 59) found the relationship positive and beneficial. Other respondents thought that differing medical opinions confused the issue (15 percent, n = 40) and 4 percent (n = 10) felt that medical services providers did not understand the occupational demands they faced.

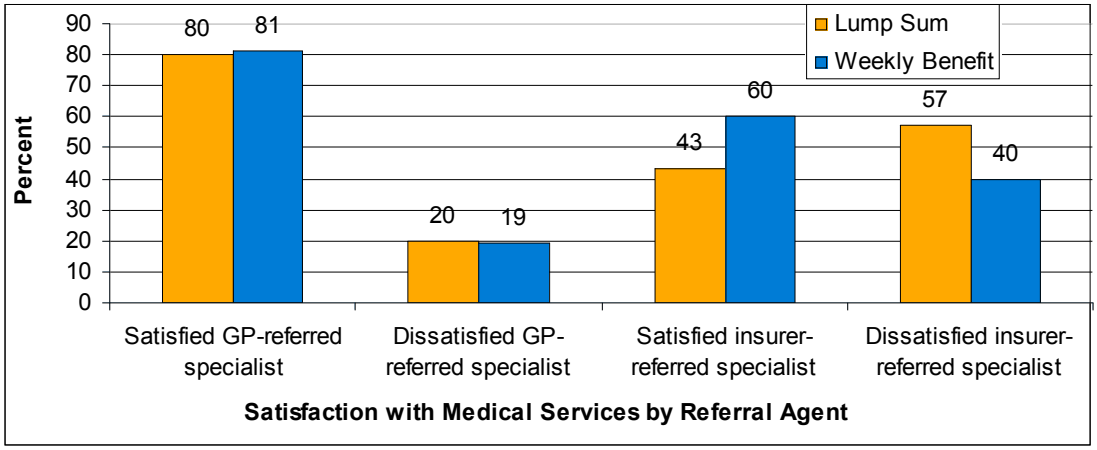
Medical Services Providers and Compensation Mode

Each of the variables related to medical services providers was tested for statistical significance with the two compensation modes, lump sum payments and weekly benefits. Those found to be statistically significant are reported below.

Respondents' views on their satisfaction with interaction with medical specialist services varied according to the source of their referral and by compensation mode. Figure 9, depicts a large and similar size majority of lump sum and weekly benefit respondents satisfied with medical specialist services where they were referred by their G.P. Fewer respondents expressed satisfaction where the referring agent was the insurance company. Differences in levels of dissatisfaction were statistically significantly different between lump sum and weekly benefit recipients. Lump sum respondents were more likely to be dissatisfied with insurer-referred specialist services ($\chi^2 = 10.783$, $df = 3$, $p = .01$, n = 419).

.

Figure 9: Satisfaction with Medical Services by Referral Agent and Compensation Mode



Comments about Medical Services

Lump sum payments recipients were more likely to report having been treated poorly and feeling that the interaction with the medical practitioner was motivated by his/her relationship with the employer and/or insurer. Weekly benefits recipients were more likely to report that they thought that differing opinions confused the issue for them, and that medical practitioners' return to work proposals lacked understanding of their occupational demands, but that they found the interaction positive and beneficial and promoted resolution of the medical aspects of the matter.

Table 43 presents a summary of these data.

Table 43: Comments about Interactions with Medical Personnel by Compensation Mode

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=168)	Percentage (n=101)
Treated poorly, e.g., rudely, contemptuously, arrogantly	27	20
The service provision appeared motivated by the provider's relationship with the insurer or employer	29	20
Differing professional opinions confused the issue	13	18
Return to work proposals lacked understanding of occupational demands	1	8
A generally positive and beneficial relationship	16	17
A very positive relationship that promoted resolution the medical aspects of the matter	4	8
Other interactions not listed above	9	10
Totals	100	100

($\chi^2 = 13.948$, $df = 6$, $p = .03$, n = 269)

Rehabilitation Providers

Summary

More than half (57 percent) of all respondents accessed rehabilitation services and approximately half of those did so within 3 months of the injury and/or illness.

A majority of respondents reported being satisfied or very satisfied with rehabilitation services.

When analysed by compensation made, lump sum payments recipients were more likely to be dissatisfied or very dissatisfied with their rehabilitation services.

A majority of respondents reported a lack of proper planning for their rehabilitation program and, when analysed by compensation mode, lump sum recipients were found more likely to make such comments.

Rehabilitation services may be accessed by workers compensation claimants at any time from the onset of the injury and/or illness. Sometimes these services complement other services such as employers' provision of return to work strategies or medical services as discussed above. The majority of respondents in the sample accessed rehabilitation services (57 percent, n = 287).

Timing of Rehabilitation Services

Given the circumstances immediately after the onset of the work-related injury illness, the timing of access to rehabilitation services varies. Table 44 presents a summary of this timing.

Table 44: Timing of Access to Rehabilitation Services Post-injury and/or illness

Timing	Percentage (n = 295)
Immediately afterwards	15
Within 3 months	32
Between 3 months and 12 months	35
More than 12 months afterwards	18
Totals	100

A substantial proportion of respondents reported accessing rehabilitation services within the first 3 months after onset of their injury and/or illness (47 percent). By 12 months after the injury and/or illness onset, 82 percent of respondents reported accessing rehabilitation services. A further proportion of 18 percent accessed rehabilitation services 12 months or more following the injury and/or illness.

Satisfaction with Rehabilitation Services

Table 45 presents a summary of these data.

Table 45: Satisfaction with Rehabilitation Services

Response	Percentage (n = 305)
Very dissatisfied	22
Dissatisfied	23
Satisfied	45
Very satisfied	10
Totals	100

While a majority of respondents expressed satisfaction with rehabilitation services, a substantial minority (45 percent) were dissatisfied. When asked to comment on their interactions with rehabilitation providers, several responses were made.

Table 46 presents a summary of these data.

Table 46: Comments about Rehabilitation Service Providers

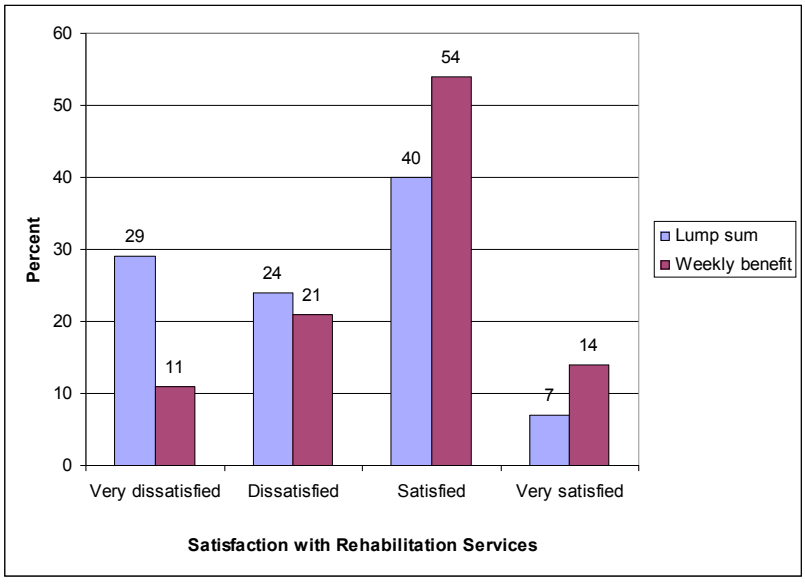
Comment	Percentage (n = 142)
No consultation about the plan	7
No plan or an unsuitable plan offered and/or implemented	50
Consultative planning and worked towards optimal outcomes	27
Other interaction not listed above	16
Totals	100

The majority of those commenting on their interactions with rehabilitation service providers reported no consultation about the rehabilitation plan or that no plan or an unsuitable plan was adopted for their rehabilitation program. About one quarter reported positively, citing examples of consultative processes aimed at optimising outcomes and achieving all planned outcomes. A smaller proportion reported other aspects of their interactions with rehabilitation providers, such as being required to consult multiple providers, being advised to return to work too soon, or being subjected to lies and deception.

Rehabilitation Providers and Compensation Modes

Each of the variables related to rehabilitation services providers was tested for statistical significance with the two compensation modes, lump sum payments and weekly benefits. Those found to be statistically significant are reported below. Respondents' satisfaction with their interaction with rehabilitation services also showed statistically significant variation by compensation mode. Figure 10, below, demonstrates the higher level of dissatisfaction and lower levels of satisfaction among lump sum recipients compared to weekly benefits recipients.

Figure 10: Satisfaction with Rehabilitation Services by Compensation Mode



($\chi^2 = 16.338$, $df = 3$, $p = .00$, n = 305)

Table 47: Comments about Rehabilitation Service by Compensation Mode

Comment	Compensation mode	
	Lump sum payments	Weekly benefit
	Percentage (n=91)	Percentage (n=51)
No plan or unsuitable plan offered and /or implemented	60	31
No consultation about the plan	3	14
Worked consultatively towards planned outcomes	23	33
Other interactions not listed above	13	22
Totals	100	100

($\chi^2 = 13.273$, $df = 3$, $p = .00$, n = 142)

Lump sum recipients were more likely to report that no plan or an unsuitable plan had been proposed and/or implemented for their rehabilitation program. Weekly benefit recipients were more likely to report no consultation in forming their rehabilitation plan, or, conversely, they were more likely to report that they worked consultatively with the provider towards planned outcomes. Weekly benefits recipients were more likely to report other interactions.

Legal Service Providers

Summary

Most respondents accessed legal services and were satisfied with the outcomes.

Lump sum payments recipients were more likely than weekly benefits recipients to access legal services

Smaller proportions of respondents felt constrained in applying the full extent of their legal entitlements through poor representation, geographical isolation, exhaustion or having to risk more money in taking their action further.

The majority of respondents sought legal services (71 percent, n=358) of whom the majority (81 percent) were satisfied or very satisfied. When asked to comment, a smaller proportion (44 percent) responded.

Table 48: Comments about Legal Services

Comment	Percentage (n = 157)
Practitioner lacked professionalism, e.g., limited expertise, low level of interest in workers compensation	29
Respondents' geographical location limited access and representation	3
Practitioner acted well but respondents' exhaustion and/or limited finances restricted full application of the legal services available	10
Practitioner acted well and ensured full entitlements were awarded	36
Other interactions not listed above	22
Totals	100

The largest proportion of respondents (36 percent) were happy with their legal outcomes while a further 10 percent felt that full compensation was not achieved because of their exhaustion with the process or the risk of losing money if they went further. Some respondents thought the practitioner lacked professionalism (29 percent) and a small proportion felt disadvantaged by their geographical isolation. Some respondents (22 percent) made other comments ranging from the difficulties in quantifying injuries/illnesses for legal purposes, the length of process (e.g., 3 years), to feeling more respected in workers compensation claims processes following legal representation.

Legal Services Providers and Compensation Modes

Each of the variables related to legal services providers was tested for statistical significance with the two compensation modes, lump sum payments and weekly benefits. Those found to be statistically significant are reported below.

Accessing Legal Services

Table 49: Access to Legal Services by Compensation Mode

Accessed legal services	Lump sum payments Percentage (N=298)	Weekly benefits Percentage (N=195)
Yes	87	51
No	13	49
Total	100	100

(χ^2 = 73.843, *df* = 1, *p* = .00, n = 493)

Lump sum payments recipients were more likely than weekly benefits recipients to access legal services.

The Workers Rehabilitation and Compensation Tribunal

Summary

One third of respondents accessed the rehabilitation and compensation tribunal.

Of those accessing the tribunal, a majority were satisfied or very satisfied with the outcome.

Almost half those commenting on the tribunal thought it was legalistic and adversarial.

Some respondents felt overwhelmed by the tribunal experience while others reported appointments with the tribunal were not kept or postponed at late notice.

Those in receipt of lump sum payments were more likely to access the tribunal.

Some workers compensation claimants wish to dispute rulings about their claim and will proceed to the rehabilitation and compensation tribunal. The nature of this service places it towards the end of processes experienced by claimants.

Accessing Workers Rehabilitation and Compensation Tribunal Services

A minority of respondents (33 percent) accessed the rehabilitation and compensation tribunal. Of these, 62 percent were satisfied or very satisfied with the outcome. A small proportion of respondents accessing the tribunal (38 percent) made comments about their experience.

Table 50: Comments about the Workers Rehabilitation and Compensation Tribunal

Comment	Percentage (n = 65)
Legalistic, adversarial	45
Responsive, supportive	29
Other comments	26
Totals	100

Some respondents felt that the tribunal process was legalistic and adversarial, while a smaller proportion thought that it was responsive and supportive of them. Another group commented otherwise, for example, feeling psychologically ground down by the experience to the point of being suicidal, having appointments not kept or the other party postponing (three instances), or simply a waste of time.

Accessing Workers Rehabilitation and Compensation Tribunal Services by Compensation Mode

Those in receipt of lump sum payments were more likely to access the tribunal.

Table 51 presents a summary of these data.

Table 51: Interaction with the Workers Compensation and Rehabilitation Tribunal

Accessed the tribunal	Compensation mode	
	Lump sum payments Percent (n=290)	Weekly benefits Percent (n=182)
Yes	46	20
No	54	80
Total	100	100

($\chi^2 = 30.864$, $df = 1$, $p = .00$, n = 472)

Health Outcomes

Summary

More than half of all respondents (60 percent) felt somewhat worse or much worse than they did before their injury and/or illness.

The data in this section provide a substantial number of indicators of WorkCover claimants' self-assessed health. To be properly interpreted it will require careful comparisons with standardised measures of general population health.

Initial results suggest that compensation mode does not affect self-assessed health outcomes. However, this result is probably biased because of the change in legislation, which means that weekly benefit recipients were more likely to have been injured recently. Careful multivariate analysis will be required to interpret these results.

Below are reported the respondents responses to the health questions. Future analysis will provide comparisons between these and the general population. The tables below sometimes refer to a "SF-36 item". This refers to a standardised measure of subjective health that will be utilised to compare the health of respondents to that of the general population. The SF-36 is a scale from which one integrated measure of self-assessed health will be constructed. However, this requires more time and further analysis.

Current Health and Well Being
Slightly less than half of respondents reported good to excellent health (45 percent). More than half reported fair to poor health (55 percent) with a majority of those reporting fair health.

Table 52: General Health

Response	Percentage (n = 505)
Excellent	3
Very good	15
Good	27
Fair	36
Poor	19
Totals	100

Health Now Compared to Immediately Prior to Injury and/or illness

More than half of all respondents (60 percent) felt somewhat worse or much worse than they did before their injury and/or illness. Of the remainder, most felt somewhat or much better than the onset of their injury and/or illness.

Table 53: Health Now Compared to Immediately Prior to Injury and/or illness

Response	Percentage (n = 505)
Much better	14
Somewhat better	7
About the same	19
Somewhat worse than	35
Much worse than	25
Totals	100

Main Influence on Health post Injury and/or illness

The largest two groups reported anxiety/stress disorders and pain as the main influences in health post injury and/or illness. Smaller proportions reported reduced physical capacity, usually manifested as weakness in performing normal tasks and pain associated with other health issues. Some respondents reported positive outcomes such as benefiting from counselling and family support, being happy in a new job, and achieving better self-understanding.

Table 54: Main Influence on Health Post-injury Illness

Response	Percentage (n = 412)
Anxiety/stress disorders with or without other health issues	20
Full or partial immobility and/or limited movement in limbs, neck or trunk	12
Pain only	21
Pain associated with other health issues	17
Weight gain only or weight gain associated with other health issues	4
Reduced physical capacity	14
Other influences negative	5
Other influences positive	7
Totals	100

Health Now Compared to One Year Ago (SF-36)

The majority of respondents (54 percent) reported their health as about the same as one year ago. Smaller proportions reported health somewhat or much worse (27 percent), and somewhat or much better (19 percent).

Table 55: Health Now and One Year Ago

Response	Percentage (n = 502)
Much better	6
Somewhat better	13
About the same	54
Somewhat worse	21
Much worse	6
Total	100

Performing Normal Activities (SF-36)

Respondents reported most limitations with respect to more physically demanding activities. Two exceptions to this general pattern are the high proportions of respondents reporting being limited a lot when bending, kneeling, or stooping, and a similarly high proportion reporting a little limitation in bathing or dressing. Table 48 presents a summary of theses data.

Table 56: Post-injury and/or illness Limitations in Physical Activity

ACTIVITY	PERCENTAGES		
	Limited a lot	Limited a little	Not limited
Vigorous activities (n = 494)	40	35	25
Moderate activities (n = 497)	40	35	25
Lifting or carrying groceries (n = 496)	25	43	32
Climbing several flights of stairs (n = 495)	30	27	43
Climbing one flight of stairs (n = 491)	14	29	57
Bending, kneeling or stooping (n = 498)	36	25	40
Walking more than one kilometre (n = 496)	27	23	50
Walking half a kilometre (n = 495)	17	25	58
Walking 100 metres (n = 493)	8	19	73
Bathing or dressing yourself (n = 496)	5	34	61

Limitations with Work or Other Activities

Limitations with Work or Other Activities Due To Physical Health (SF-36)

While there was little difference between proportions of respondents reporting yes or no to cutting down time on work or other activities, greater proportions reported reduced outcomes from their efforts, reduced range in the kinds of work or other activities attempted, and increased difficulty in performing work or other activities.

Table 57: Limitations with Work or Other Activities Due To Physical Health

RESPONSE	PERCENTAGES	
	Yes	No
Cut down time spent on work or other activities (n = 465)	52	48
Accomplished less than you would like (n = 479)	69	31
Limited in the kind of work or other activities (n = 472)	68	32
Had difficulty in performing work or other activities (n = 477)	68	32

Limitations with Work or Other Activities Due To Emotional Health (SF-36)

There was little difference between proportions of respondents reporting *Yes* or *No* in cutting time spent on work or other activities, the proportion increased for those reporting that they had accomplished less than they would like. A majority of respondents reported that they did do work or other activities as carefully as usual.

Table 58: Limitations with Work or Other Activities Due To Emotional Health

RESPONSE	PERCENTAGES	
	Yes	No
Cut down time spent on work or other activities (n = 479)	53	47
Accomplished less than you would like (n = 483)	63	37
Didn't do work or other activities as carefully as usual (n= 472)	42	58

Physical or Emotional Health Affecting Normal Social Activities (SF-36)

While approximately one quarter of respondents reported no limitations on normal activities from their physical or emotional health, approximately half reported that they were affected moderately to quite a bit. The lowest proportion of respondents reported extreme effects.

Table 59: Physical or Emotional Health Affecting Normal Activities

Response	Percentage (n = 497)
Not at all	24
Slightly	16
Moderately	24
Quite a bit	24
Extremely	12
Total	100

Bodily Pain in the Last Four Weeks (SF-36)

Two thirds of respondents reported moderate to very severe bodily pain in the past four weeks. These data corroborate data reported above: pain is prevalent in this research cohort and can be associated with other health issues or can be an isolated medical problem.

Table 60: Bodily Pain in the Last Four Weeks

Response	Percentage (n = 500)
No bodily pain	14
Very mild	8
Mild	11
Moderate	37
Severe	23
Very severe	7
Total	100

Pain Interfering With Normal Work, Including Housework (SF-36)

Three quarters of respondents reported that pain interfered with their normal work, including housework. These data corroborate those in Table 60 and elsewhere, indicating that pain either associated with other health issues in isolation is a major factor in this research cohort.

Table 61: Pain Interfering With Normal Work

Response	Percentage (n = 499)
Not at all	18
Slightly	17
Moderately	26
Quite a bit	29
Extremely	10
Total	100

Self-Assessed Subjective Health: SF-36 Factors

A small proportion of respondents reported feeling nervous for all of the time to a good bit of the time in the last four weeks compared to those who reported feeling nervous from some to none of the time. Almost three quarters of respondents reported feeling unhappy or cheerless for either some of the time, a little of the time, or none of the time in the last four weeks. A substantial minority (39 percent) reported feeling let down for a good bit of the time to all of the time. A majority of respondents reported feeling worn out for a good bit of the time to all of the time in the last four weeks. Quite a small proportion (8 percent) reported feeling worn out for none of the time. A majority of respondents reported feeling tired a good bit of the time to all of the time in the last four weeks.

Table 62: Mental Health

Response	*Feeling nervous in the last four weeks*	*Feeling unhappy and cheerless in the last four weeks*	*Felt let down in the last four weeks*	*Feeling calm and peaceful in the last four weeks*	*Been a happy person in the last four weeks*
	Percentage (n = 502)	Percentage (n = 499)	Percentage (n = 499)	Percentage (n = 499)	Percentage (n = 500)
All of the time	6	3	13	4	3
Most of the time	9	12	14	19	28
A good bit of the time	12	11	12	11	17
Some of the time	22	22	20	24	28

Table 62: Mental Health (continued)

Response	*Feeling nervous in the last four weeks*	*Feeling unhappy and cheerless in the last four weeks*	*Felt let down in the last four weeks*	*Feeling calm and peaceful in the last four weeks*	*Been a happy person in the last four weeks*
	Percentage (n = 502)	Percentage (n = 499)	Percentage (n = 499)	Percentage (n = 499)	Percentage (n = 500)
A little of the time	26	22	18	26	20
None of the time	25	30	23	16	4
Total	100	100	100	100	100

Self-Assessed subjective health: SF-36 factors

Two thirds of respondents reported feeling full of life from some of the time to none of the time. Approximately one third of respondents (34 percent) reported feeling calm and peaceful for a good bit of the time to all of the time. Three quarters of respondents reported having a lot of energy either some of the time, or a little of the time, or none of the time in the last four weeks. A minority reported having a lot of energy for a good bit of the time to all of the time.

Table 63: Vitality

	Had a lot of energy in the last four weeks	*Felt full of life in the last four weeks*	*Felt worn out in the last four weeks*	*Felt tired in the last four weeks*
Response	Percentage (n = 500)	Percentage (n = 496)	Percentage (n = 500)	Percentage (n = 496)
All of the time	2	3	11	15
Most of the time	9	17	23	24
A good bit of the time	14	12	17	20
Some of the time	27	25	26	25
A little of the time	25	22	15	12

Table 63: Vitality (continued)

	Had a lot of energy in the last four weeks	*Felt full of life in the last four weeks*	*Felt worn out in the last four weeks*	*Felt tired in the last four weeks*
Response	Percentage (n = 500)	Percentage (n = 496)	Percentage (n = 500)	Percentage (n = 496)
None of the time	23	21	8	4
Total	100	100	100	100

Effect of Emotional or Physical Health on Social Activities (SF-36)

A majority of respondents reported their emotional or physical health affected their social activities for some of the time to all of the time in the last four weeks. The remainder reported that their emotional or physical health affected their social activities for a little of the time or none of the time.

Table 64: Effect of Emotional or Physical Health on Social Activities

Response	**Percentage (n = 499)**
All of the time	9
Most of the time	20
Some of the time	33
A little of the time	19
None of the time	19
Total	100

General Health (SF-36)

The majority of respondents (60 percent) did not think that they became sick more than others, while the remainder either did not know (20 percent) or thought it was true (19 percent). However, only one third of respondents were confident about their health, with one third being uncertain about their future health and one third expecting their health to become worse.

Table 65: General Health (SF-36)

	I become sick more than others	*I expect my health to become worse*
Response	Percentage (n = 494)	Percentage (n =495)
Definitely true	8	13

Table 65: General Health (SF-36) (continued)

	I become sick more than others	*I expect my health to become worse*
Response	Percentage (n = 494)	Percentage (n =495)
Mostly true	11	20
Don't know	20	35
Mostly false	26	15
Definitely false	35	17
Total	100	100

Health Self Evaluations

Approximately one third of respondents reported they thought they were as healthy as anyone they know, while a smaller proportion reported that they did not know. Approximately one third of respondents reported that their health was "excellent".

Table 66: Health Self Evaluations

Response	*I am as healthy as anyone I know*	*My health is excellent*
	Percentage (n = 492)	Percentage (n = 489)
Definitely true	9	4
Mostly true	28	30
Don't know	19	11
Mostly false	20	22
Definitely false	24	33
Total	100	100

Ongoing Health Problems

A substantial majority of respondents reported ongoing health problems from their work related injury and/or illness, some of whom are receiving medical treatment.

Table 67: Ongoing Health Problems from Injury and/or illness

Response	**Percentage (n = 500)**
Yes	84
No	16
Total	100

Medical Treatment for Injury and/or illness

The majority of respondents reported receiving pain relief treatment for their work related injury and/or illness. Another substantial proportion reported treatment for depression or related health outcomes and a third group reported other treatments of which physiotherapy either alone or in association with other treatments was the most prevalent (42 percent).

Table 68: Medical Treatment for Injury and/or illness

RESPONSE	PERCENTAGES	
	Yes	No
Surgical procedures (n = 505)	6	94
Pain relief (n = 505)	52	48
Depression or emotional health outcomes (n = 505)	31	69
Other treatment e.g., physiotherapy, medication, osteopathy (n = 505)	21	79

Work Related Health Problems

The largest proportion of respondents reported pain only as a continuing work related health problem while a similar-sized group reported anxiety/stress disorders either alone or in association with other health issues. Together, these two categories accounted for the majority of the responses. Other groups reported limited mobility and/or movement issues and reduced physical capacity. Among those reporting other health problems, medication side effects, surgical complication and hearing loss formed the major categories, although no category contained more than four respondents.

Table 69: Work Related Health Problems

Response	Percentage (n = 433)
Anxiety/stress disorders with or without other health issues	24
Full or partial immobility and/or limited movement in limbs, neck or trunk	16
Pain only	27
Pain associated with other health issues	16
Reduced physical capacity	11
Other work related health problems e.g., medication side effects, surgical complications, hearing impairment	6
Total	100

Ongoing Care

The majority of respondents reported that they no longer required day-to-day care (Table 62). Of those that did report that they required care, the provider of the care is reported in Table 71. Three quarters of respondents reported family members provided unpaid care for them. The next largest proportion was that of other care, of whom 71 percent reported caring for themselves.

Table 70: Ongoing Care

Response	Percentage (n = 505)
Yes	20
No	80
Total	100

Table 71: Care Provider

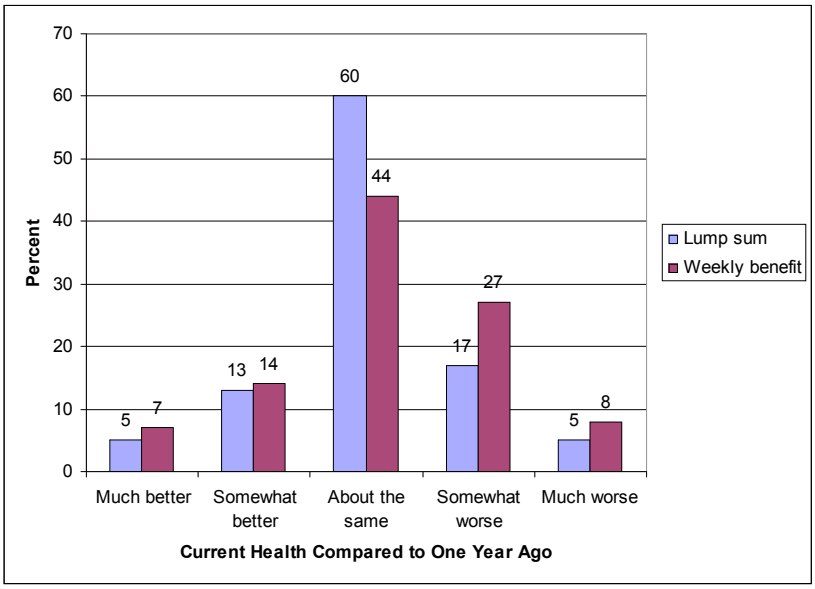
Response	Percentage (n = 124)
Paid carer, nurse, or housekeeper	6
Unpaid friend, neighbour, or volunteer	6
Unpaid spouse, parent, child, or sibling	77
Other care e.g., self	11
Total	100

Health Outcomes by Compensation Mode

The major finding in the health data is that there are virtually no statistically significant differences. This is very important because it shows that health outcomes are seemingly unrelated to compensation mode – and that this result is probably against what most would assume. One area of difference is respondents' rating of their current health with that of their health one year ago. Weekly benefit recipients are more likely to report their health as worse now than once year ago (35 percent to 22 percent). Other comparisons suggest that people on weekly benefits are more likely to feel that moderate physical activity is limited, they are less likely to feel "full of life" and more likely to feel "let down". The results are summarised in the tables below.

However, it should be noted that respondents in receipt of weekly benefits are more likely to have made their claim recently, and so may not have progressed as far in rehabilitation as those in receipt of a lump sum. Later multivariate analyses will determine whether these results are influenced by other factors such as length of time since the workers' injury and/or illness.

Figure 11: Current Health Compared to One Year Ago by Compensation Mode



($\chi^2 = 12.840$, $df = 4$, $p = .01$, n = 502)

Table 72: Health Effects on Moderate Activities

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=298)	Percentage (n=199)
Yes, limited a lot	35	48
Yes, limited a little	37	31
No, not limited	28	22
	100	100

($\chi^2 = 8.247$, $df = 2$, $p = .02$, n = 497)

Table 73: Felt Full Of Life in the Last Four Weeks

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=296)	Percentage (n=200)
All of the time	4	2
Most of the time	16	17
A good bit of the time	13	11
Some of the time	29	20
A little of the time	21	25

Table 73: Felt Full Of Life in the Last Four Weeks (continued)

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=296)	Percentage (n=200)
None of the time	18	27
Totals	100	100

($\chi^2 = 12.610$, $df = 5$, $p = .03$, n = 496)

Table 74: Felt Let Down in the Last Four Weeks

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=296)	Percentage (n=200)
All of the time	12	14
Most of the time	11	20
A good bit of the time	11	13
Some of the time	20	20
A little of the time	20	14
None of the time	26	20
Totals	100	100

($\chi^2 = 12.194$, $df = 5$, $p = .03$, n = 499)

Financial Outcomes

Summary

After the first reduction in weekly benefits, nearly half of respondents (49 percent) reported they were adequately managing or managing quite well. The other half was "barely managing" (44 percent) or not managing (7 percent).

Following the second weekly benefits reduction, the number of respondents reporting they were adequately managing or managing quite well fell to one third (34 percent) with nearly half (48 percent) barely managing and 18 percent not managing.

The majority of respondents reported being dissatisfied (37 percent) or very dissatisfied (24 percent) with their lump sum payment. Approximately 40 percent of respondents reported being satisfied or very satisfied.

A substantial majority (63 percent) of respondents reported retaining none of their lump sum payment. A smaller proportion (18 percent) reported retaining less than half and, collectively, these two categories accounted for 81 percent of responses.

Similar to the health outcomes, compensation mode does not seem to affect financial outcomes. Both compensation modes report significant amounts of financial distress. Although, again, caution is required in interpreting this result due to the complexities in the data created by the legislation change. More sophisticated analysis is required.

An exception to this is with respect to credit card payments. People on weekly benefits are nearly twice as likely to report difficulty paying their credit card minimum amount on time.

Those on weekly benefits are more likely to report the source of their current income to include their own income compared to lump sum recipients (63 percent to 43 percent). In contrast, nearly one quarter of lump sum recipients report Centrelink as their primary source of household income compared to just four percent of weekly benefit recipients.

Housing Status

The majority of respondents live in either owned or mortgaged housing. Minorities live in rented privately owned or government-owned housing, boarding establishments, or other accommodation such as living in a bus, caravan, yacht or employer-owned accommodation.

Table 75: Respondents' Housing Status

Housing status	Percentage (n = 502)
Own outright	39
Paying of a mortgage	41

Table 75: Respondents' Housing Status (continued)

Housing status	Percentage (n = 502)
Renting from Housing Tasmania	2
Renting privately	12
Boarding	3
Other e.g., bus, caravan, yacht, live-in employer-owned accommodation,	3
Total	100

Access to Money

The majority of respondents reported that they would be able to access $2000 in one week

Table 76: Access $2000 in One Week

Response	Percentage (n = 493)
Most likely	43
Likely	19
Unlikely	16
Most unlikely	22
Total	100

Meeting Household and Related Expenses

The majority of respondents reported being able to meet their household and related expenses. Among those who reported that they could not, the highest proportions could not pay for household utilities or car registration and insurance on time. While a sizeable proportion or respondents reported seeking assistance from family and friends, a very low proportion reported seeking help from community organisations. A noticeable proportion or respondents reported pawning or selling possessions for cash.

Table 77: Meeting Household and Related Expenses

HOUSEHOLD OR RELATED EXPENSE	PERCENTAGE	
	Yes	No
Could not pay electricity, gas, or telephone on time (n = 504)	20	80
Could not pay mortgage or rent payments on time (n = 504)	9	91
Could not pay for car registration or insurance on time (n = 504)	22	78
Could not make minimum payment on credit card (n = 504)	12	88
Pawned or sold something because you need cash(n = 504)	14	86
Went without meals(n = 504)	8	92
Were unable to heat your home (n = 504)	8	92
Sought assistance from friends or family(n = 504)	24	76
Sought assistance from community organisations(n = 504)	4	96

Current Status of Workers Compensation Claim

The majority respondents reported that their claims were settled. About one quarter reported that their claim was ongoing and three percent reported that their claim was in dispute.

Table 78 Current Status of Workers Compensation Claim

Response	Percentage (n = 495)
Ongoing	25
In dispute	3
Settled	72
Total	100

Year of Settlement

The proportions of settlement years reported by respondents appears to peak in 2003. The general reduction beyond 2003 to 2007 is more gradual compared with the steepness of the rise from 1999 to 2003.

Table 79: Year of Settlement

Year	Percentage (n = 312)
1999	1
2000	5
2001	4
2002	12
2003	19
2004	16
2005	17
2006	13
2007	13
Total	100

Current Financial Position

Cover for Expenses Related To Workers Compensation

The majority of respondents reported being adequately to quite well covered for their travel and/or accommodation expenses related to their claim, for medical aids or assistance expenses, and for medical treatment related to their claim.

Table 80: Cover for Expenses Related to Workers Compensation

	Cover for travel and/or accommodation expenses	*Cover for medical aids or assistance*	*Cover for medical treatment*
Response	Percentage (n = 381)	Percentage (n = 400)	Percentage (n = 438)
Poorly	18	14	13
Barely	16	11	10
Adequately	39	37	35
Quite well	27	38	42
Total	100	100	100

Paying For Changes around the Home and Elsewhere to Accommodate Injury and/or illness

The majority of respondents reported paying for expenses related to their motor vehicle and those associated with their home life. A smaller proportion reported installing hand or safety rails at home (particularly in showers or bathrooms), and a quite small percentage reported spending money to provide disabled access to their homes. Some respondents reported other changes, such as buying an electric scooter, replacing wood heating with electric or gas, relacing their bath with a shower, and buying furniture and mattresses that are more suitable for them.

Table 81: Paying For Changes at Home and Elsewhere

CHANGES AROUND THE HOME	PERCENTAGES	
	Yes	No
Spent own money on installing additional facilities such as hand or safety rails at home (n = 417))	13	87
Spent own money providing wheelchair or other disabled access at home (n = 391)	2	98
Spent own money modifying or changing motor vehicle e.g., automatic transmission (n = 433)	25	75
Other changes like this e.g., levelling back yard, establishing a chemical-free home, providing separate beds, paying others for wood cutting and fixing car (n = 334)	19	81

Changes in Housing since Injury and/or illness

While a significant number of people reported changes to their housing, there is no single simple reason for these changes. Some of the more common reasons are listed in Table 82. The "other changes" category included reasons such as: moving for financial reasons e.g., bought house with payout, forced sale, made bankrupt; or lifestyle reasons (moved to flatter block, bought house without stairs, bought lower maintenance house, moved to quieter area); or family or community reasons, e.g., moved closer to family and community support; or moved for marital reasons.

Table 82: Changes in Housing since Injury and/or illness

CHANGES IN HOUSING	PERCENTAGES	
	Yes	No
Moved to be near medical and/or rehabilitation facilities (n = 504)	3	97
Sold house – unable to meet mortgage payments (n = 504)	3	97
Sold house to cover expenses and debts (n = 504)	3	97
Purchased a more expensive house (n = 504)	3	97

Table 82: Changes in Housing since Injury and/or illness (continued)

CHANGES IN HOUSING	PERCENTAGES	
	Yes	No
Moved to lower-priced rental accommodation (n = 504)	5	95
Other changes (n = 504)	11	89

Current Financial Position

The majority or respondents reported that they were managing quite well or adequately, but one third reported that they were barley managing.

Table 83: Current Financial Position

Response	Percentage (n = 502)
Managing quite well	18
Adequately managing	46
Barely managing	33
Not managing	3
Total	100

Weekly Benefits

The majority of respondents reported receiving weekly benefits at some stage in their compensation history (Table 84). The majority of respondents reported receiving a first reduction in weekly benefits (Table 85) and a smaller majority of respondents reported receiving a second reduction in weekly benefits (Table 86).

Table 84: Received Weekly Benefits

Response	Percentage (n = 502)
Yes	86
No	14
Total	100

Table 85: Received First Weekly Benefit Reduction

Response	Percentage (n = 502)
Yes	81
No	19
Total	100

Table 86: Received Second Weekly Benefit Reduction

Response	Percentage (n = 502)
Yes	65
No	35
Total	100

Financial Position after First Reduction in Weekly Benefit

Nearly half of respondents (49 percent) were adequately managing or managing quite well after the first reduction in weekly benefits. The other half was "barely managing" (44 percent) or not managing (7 percent).

Table 87: Financial Position after First Reduction in Weekly Benefit

Response	Percentage (n = 340)
Managing quite well	6
Adequately managing	43
Barely managing	44
Not managing	7
Total	100

Financial Position after Second Reduction in Weekly Benefit

Following the second weekly benefits reduction, the number of respondents reporting they were adequately managing or managing quite well fell to one third (34 percent) with nearly half (48 percent) barely managing and 18 percent not managing.

Table 88: Financial Position after Second Reduction in Weekly Benefit

Response	Percentage (n = 242)
Managing quite well	4
Adequately managing	30
Barely managing	48

Table 88: Financial Position after Second Reduction in Weekly Benefit (continued)

Response	Percentage (n = 242)
Not managing	18
Total	100

Satisfaction with Weekly Payments

Just over one half (55 percent) of respondents reported that they were dissatisfied or very dissatisfied with weekly benefits. A substantial proportion reported that they were satisfied with their weekly benefits. This statistic includes all who had received weekly benefits at any time in the past, including those who subsequently went on to receive a lump sum. Future analysis will examine if the level of satisfaction is influenced by other factors.

Table 89: Satisfaction with Weekly Payments

Response	Percentage (n = 387)
Very dissatisfied	23
Dissatisfied	32
Satisfied	41
Very satisfied	4
Total	100

Comments about Weekly Benefits

In the additional respondent written comments, a substantial majority of respondents reported that they were unhappy about their experiences of weekly benefits. One percent of respondents (n = 2) reported it was a good system. As indicated, there is some appreciation of recent changes to legislation.

Table 90: Comments about Weekly Benefits

Response	Percentage (n = 387)
Unfair to lose income	31
Suffered hardship	20
Lost out financially	36
Good system	1

Table 90: Comments about Weekly Benefits (continued)

Response	Percentage (n = 387)
Other comments e.g., claim was challenged so had to use long service and recreation leave for living expenses; felt more like a criminal than a victim; laws need to be changed; recognises value of changed legislation; unfair to lose income when all are insured	12
Total	100

Lump Sum Payments

The greatest proportion of respondents reported receiving negotiated payments, followed by undefined lump sums. Minorities of respondents reported receiving common law, impairment, redemption, and unspecified lump sums.

Table 91: Types of lump sum payments

TYPE OF PAYMENT	PERCENTAGES	
	Yes	No
Common law (n = 505)	5	95
Impairment (n = 488)	3	97
Lump sum (n = 393)	22	78
Negotiated (n = 355)	30	70
Redemption (n = 501)	1	99
Unspecified (n = 505)	5	95

Value of Lump Sum Payments

The greatest proportion of respondents reported receiving between $25,000 and $34,999 as a lump sum payment. Other relatively high proportions of respondents reported receiving between $10,000 and $24,999 and $35,000 and $49,999. It is noted that one per cent of respondents reported receiving between $1 and $9,999, and 13 per cent reported receiving $10,000 to $24,999. The former category should have drawn no responses, given the sampling criteria applied in the study (lump sums of $20,000 or more) and, presumably, those in the latter category would be reporting lump sums of $20,000 or more. It is possible that a lump sum had been received by a weekly benefits subject between the time of accruing $20,000 in weekly benefits (December 2006) and completing the survey questionnaire (August 2007). It is noted below that a proportion of respondents reported receiving lump sum payments in 2007.

Table 92: Value of Lump Sum Payments

Value range ($)	Percentage (n = 298)
1 – 9,999	1
10,000 – 24,999	13
25,000 – 34,999	15
35,000 – 49,999	12
50,000 – 59,999	11
60,000 – 74,999	10
75,000 – 89,999	11
90,000 – 119,999	10
120,000 – 174,999	7
175,000 or more	10
Total	100

Year in Which Lump Sum Was Paid

The greatest proportion of respondents reported receiving a lump sum payment in 2004 with similar rates of rise and fall in the two years pre- and post-2004. The lower representation of pre-2002 responses reflects the earlier-reported tendency for those in the respondent sample to have made claims, and therefore settlements, later in the period 1999 – 2006 than those in the research population.

Table 93: Year in Which Lump Sum Was Paid

Year	Percentage (n = 275)
1999*	1
2000	5
2001	5
2002	14
2003	19
2004	21
2005	17
2006	11
2007*	7
Total	100

*part year only

Satisfaction with lump sum payment

The majority of respondents reported being dissatisfied or very dissatisfied with their lump sum payment. Approximately one third of respondents reported satisfaction, but a much smaller proportion reported being very satisfied.

Table 94: Satisfaction with Lump Sum Payment

Response	Percentage (n = 298)
Very dissatisfied	24
Dissatisfied	37
Satisfied	35
Very satisfied	4
Total	100

Retention of Lump Sum Payment

A substantial majority of respondents reported retaining none of their lump sum payment. A smaller proportion reported retaining less than half and, collectively, these two categories accounted for 81 percent of responses. A quite small proportion of respondents reported retaining all or more of their lump sum, presumably through investment where reporting more than the sum awarded.

Table 95: Retention of Lump Sum

Response	Percentage (n = 298)
None retained	63
Less than half retained	18
More than half retained	12
All or more retained	7
Total	100

Comments about Lump Sum Payment

Respondents' comments ranged over a number of themes: dissatisfaction, disappointment, and moving towards autonomy. Firstly, some of those who were dissatisfied commented simply that the payment was unsatisfactory. Included with these respondents is another group that reported the process stressful, intimidating, or manipulative. Collectively, these groups expressing dissatisfaction made up 32 percent of responses.

A second group reported disappointment about missed opportunities, past, present or future, such as settling too soon through exhaustion or financial risk in proceeding further, or suffering diminished employment and career prospects post-claim

settlement. These groups reporting disappointment comprised 21 percent of responses collectively.

The third group focused on the use of the payment to re-establish their autonomy, be it paying off claim expenses, helping in their return to work, investing in housing, superannuation, or current or future medical treatment. A quite small proportion of respondents (3 percent) commented simply that their payment was satisfactory and, presumably, was viewed as a pathway towards autonomy. These groups comprised 47 percent of responses collectively.

Table 96: Comments about Lump Sum Payment

Comment	Percentage (n = 150)
Unsatisfactory	27
Found the process stressful, intimidating or manipulative	5
Exhaustion and/or financial risk forced acceptance of lower settlement	14
Poorer health and/or fitness has diminished employment and career prospects	7
Used to pay off claim expenses	24
Used to help in return to work	9
Invested in housing, superannuation, or current or future medical treatment	11
Satisfactory	3
Total	100

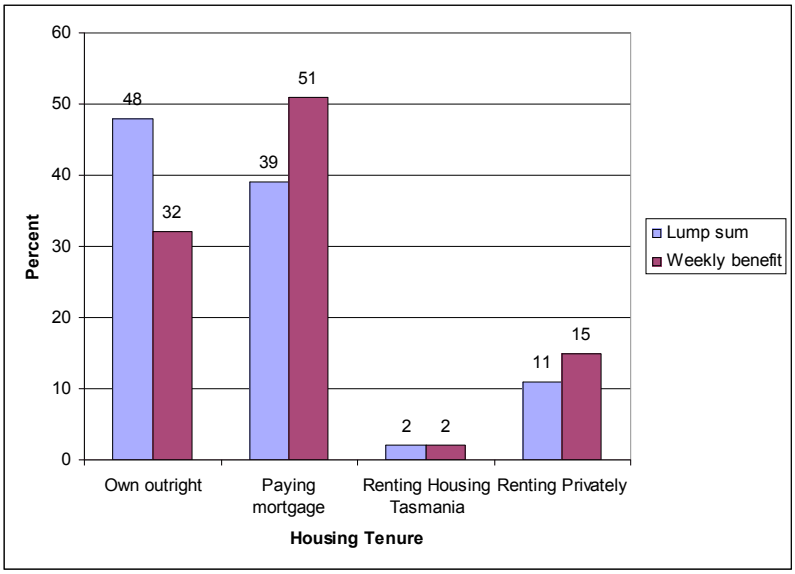
Financial Outcomes by Compensation Mode

Except for a few areas discussed below, respondents' financial outcomes were similar to their health outcomes respondents in that both compensation modes reported similar levels of financial stress. Interestingly, weekly benefit recipients were more likely to report difficulty in paying their credit cards than those receiving lump sums. The main areas of differentiation by compensation mode related to current personal annual income, source of household income, and housing tenure.

Housing Tenure

Although not reaching statistical significance, housing, as depicted in Figure 12, indicates that lump sum recipients tend towards owning their home outright while weekly benefits recipients tend towards mortgagee status. Collectively, both groups are more likely to be homeowners (owner or mortgagee) rather than occupy other forms of tenure. This difference might be attributed to the ability of those receiving a lump sum using those monies to pay off their mortgage. This group is also slightly older and so more likely to be homeowners outright. Further analysis is required.

Figure 12: Housing Tenure by Compensation Mode

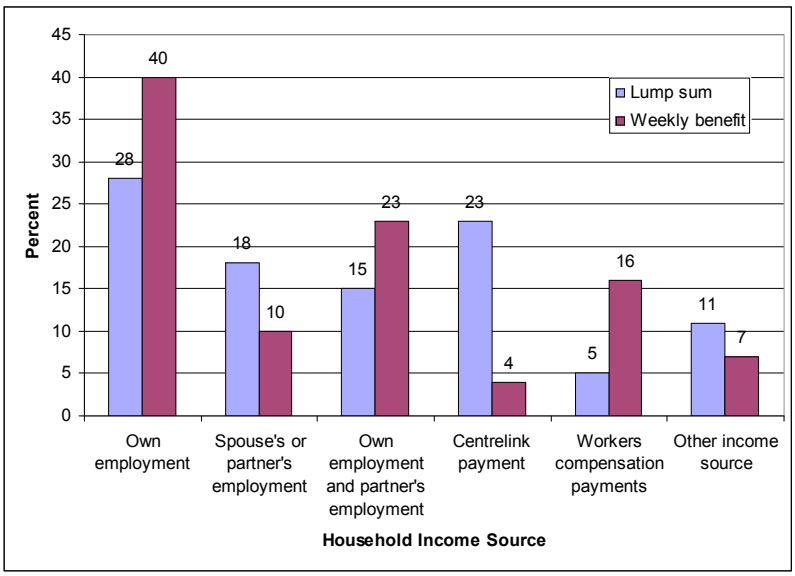


($\chi^2 = 10.843$, $df = 5$, $p = .06$, n = 503)

Source of Current Income

The data on both source of current income (household) and level of current annual income (personal) provides another interesting comparison. As seen in Figure 13 below, those on weekly benefits are more likely to report the source of their current income to be either from their own and/or their spouses' income than lump sum recipients (63 percent to 43 percent). By contrast, nearly one quarter of lump sum recipients report Centrelink as their primary source of household income compared to just four percent of weekly benefit recipients. Again, while the age of respondents may have some influence here, weekly benefits recipients are clearly more likely to retain a strong link to the labour market.

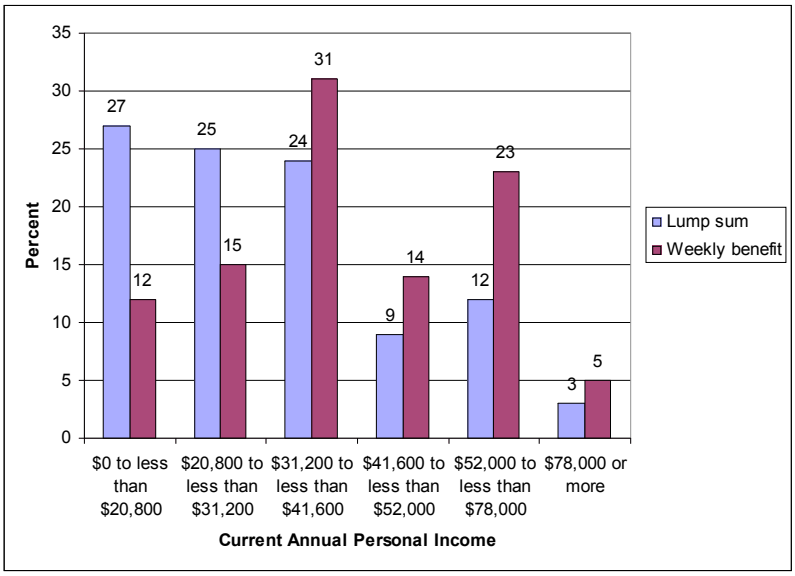
Figure 13: Household Income Source by Compensation Mode



($\chi^2 = 65.969$, $df = 5$, $p = .00$, n = 496)

Those data depicted in Figure 14 below indicate that lump sum recipients are more likely to report incomes in the lower three income ranges, while weekly benefits recipients are more likely to report incomes in the upper four income ranges. Interestingly, despite the obvious difference in current level of income, these results do not translate into differences on how respondents from the two compensation modes feel that they are managing financially. Just over a third of each group reported that they were not managing or barely managing financially.

Figure 14: Current Annual Personal Income by Compensation Mode



($\chi^2 = 18.351$, $df = 6$, $p = .01$, n = 276)

Table 97: Paying Credit Card Account on Time

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=304)	Percentage (n=200)
Unable to pay on time	9	16
Able to pay on time	91	84
Totals	100	100

($\chi^2 = 5.302$, $df = 1$, $p = .02$, n = 504)

People on weekly benefits are more likely to report that they are unable to pay the minimum amount on their credit card by the due time.

Table 98: Compensation for Travel and /or Accommodation Expenses

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=220)	Percentage (n=161)
Poorly	21	14
Barely	20	11
Adequately	42	34
Quite well	16	41
Totals	100	100

($\chi^2 = 30.127$, $df = 3$, $p = .00$, n = 381)

People with lump sum benefits are more likely to report they have been inadequately compensated for travel or accommodation expenses, whereas people on weekly benefits are more likely to report that they have been compensated "quite well" for these expenses.

Table 99: Compensation for Medical Aids and Assistance

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=232)	Percentage (n=168)
Poorly (n = 56)	17	10
Barely (n = 46)	14	8
Adequately (n = 147)	41	31
Quite well (n = 151)	28	51
Totals	100	100

($\chi^2 = 23.181$, $df = 3$, $p = .00$, n = 400)

People with lump sums are more likely to feel inadequately compensated for their expenses associated with medical aids and assistance.

Table 100: Compensation for Medical Treatment

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=256)	Percentage (n=182)

Poorly	16	9
Barely	14	4

Table 100: Compensation for Medical Treatment (continued)

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=256)	Percentage (n=182)
Adequately	38	30
Quite well	32	57
Totals	100	100

($\chi^2 = 31.727$, $df = 3$, $p = .00$, n = 438)

People with lump sum payments are more likely to feel inadequately compensated for the expenses of their medical treatment.

Table 101: Current Sources of Income

Response	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=299)	Percentage (n=197)
Your employment (n = 164)	28	40
Your spouses' or partners' employment (n = 73)	18	9
Your employment and your partners' employment (n = 92)	15	24
Centrelink payment (n = 74)	23	3
Workers compensation payments (n = 46)	5	16
Other income source (n = 47)	11	8
Totals	100	100

($\chi^2 = 65.969$, $df = 5$, $p = .00$, n = 496)

People on lump sums are more likely to rely on their spouse or a Centrelink payment for income.

Table 102: Current Income from Work

Income range ($)	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=153)	Percentage (n=123)
0 to 10,400 (n = 25)	13	4
10,401 to 20,800 (n = 31)	14	8
20,801 to 31,200 (n = 57)	25	15
31,201 to 41,600 (n = 74)	24	31
41,601 to 52,000 (n = 31)	9	14
52,001 to 78,000 (n = 47)	12	23
78,001 or more (n = 11)	3	5
Totals	100	100

($\chi^2 = 18.351$, $df = 6$, $p = .01$, n = 276)

People with lump sum payments are more likely to have lower current incomes.

Table 103: Current Gross household income

Income range ($)	Compensation mode	
	Lump sum payments	Weekly benefits
	Percentage (n=285)	Percentage (n=193)
0 to 10,400 (n = 30)	10	2
10,401 to 20,800 (n = 75)	22	7
20,801 to 31,200 (n = 78)	18	15
31,201 to 41,600 (n = 91)	16	24
41,601 to 52,000 (n = 54)	9	15
52,001 to 78,000 (n = 74)	13	19
78,001 or more (n = 76)	13	20

($\chi^2 = 41.614$, $df = 6$, $p = .00$, n = 478)

The overall household income is also more likely to be lower for people who have received lump sum payments.

Social Outcomes

Summary

The majority (53 percent) of respondents reported worse or much worse family life Post-injury and/or illness.

Nearly half of respondents (43 percent) reported their spouse or partner had changed their labour market activity because of their injury and/or illness.

Forty percent of respondents felt that their role within the family has changed for the worse.

Two thirds of respondents reported that they had someone to turn to for advice in times of crisis. However, 14 percent said they never had any one to turn to and 17 percent said they rarely had someone to turn to.

Although all respondents reported significant and negative impacts on their social functioning because of their workplace injury and/or illness, these were not differentiated by compensation mode. Both lump sum and weekly recipients were equally likely to report such outcomes.

Changes in Pre- to Post-injury and/or illness Family Life

The majority of respondents reported worse or much worse family life Post-injury and/or illness. A quite small proportion reported it better or much better.

Table 104: Changes in Pre- to Post- Injury and/or illness Family Life

Response	Percentage (n = 496)
Much better	4
Better	8
Neither worse nor better	35
Worse	35
Much worse	18
Total	100

Changes in Marital Situation Pre- Post-injury and/or illness

The majority of respondents reported no change to their marital status from pre- to post injury and/or illness. Of those whose marital status was changed, those divorcing/separating formed the greatest proportion.

Table 105: Changes in Marital Status Pre- to Post-injury and/or illness

Response	Percentage (n = 477)
No change	84
Separated/divorced since	11
Married/partnered since	5
Total	100

Injury and/or illness effect on spouse or partner

Nearly half of respondents (43 percent) reported their spouse or partner had changed their labour market activity because of their injury and/or illness. For 13 percent of respondents, their spouse or partner returned to the labour market because of their illness/injury. Other respondents (15 percent) reported that their spouse or partner increased their hours of work because of their injury and/or illness. A small number (6 percent) of respondents reported that their spouse or partner worked fewer hours because of their illness/injury. A similar small number (6 percent) of respondents reported that their spouse or partner left paid work because of their injury and/or illness. About half of respondents reported that their spouse or partner made none of the changes noted.

Table 106 presents a summary of these data.

Table 106: Spouse or Partner Labour Market Status

Spouse or partner:	*Returned to labour market*	*Left paid work*	*Increased hours of work*	*Worked fewer hours*	*Made none of these employment changes*
Response	Percentage (n = 505)	Percentage (n = 505)	Percentage (n = 505)	Percentage (n = 505)	Percentage (n = 505)
Yes	13	6	15	6	43
No	87	94	85	94	57
Total	100	100	100	100	100

Family Relationships

These questionnaire items originated from workers compensation claimants' statements published in other studies where families were observed either developing closer relationships or fragmenting Post-injury and/or illness. Forty percent of respondents felt that their role within the family had changed for the worse.

Relatively high proportions of respondents reported the *Does not apply* responses in these items, including Post-injury and/or illness occurrences of respondents' children being teased (91 percent) and changes in Post-injury and/or illness behaviour of respondents' children (77 percent). One item where the statement applied to any degree and made up a majority of the responses was that of Post-injury and/or illness family warmth. Next ranked this way were those items relating to changes in the Post-injury illness family role (49 percent), changes in Post-injury family social activities (33 percent).

Table 107 presents a summary of these data.

Table 107: Family Relationships

Response	***There is more warmth in my family now***	***My children have become uncooperative***	***My role within the family has changed for the worse***	***My family members are more involved in outside activities***	***My children have been teased due to my injury and/or illness***
	Percentage (n = 505)	Percentage (n = 505)	Percentage (n = 505)	Percentage (n = 505)	Percentage (n = 505)
Does not apply	49	77	51	67	91
Barely applies	17	9	10	13	5
Applies to some extent	27	9	24	15	3
Applies a great deal	7	5	15	5	1
Total	100	100	100	100	100

Post-injury and/or illness social life

These questionnaire items relate to respondents' social life including others in addition to their families.

Table 108 presents a summary of data related to perceptions of social life Post-injury and/or illness. The majority of respondents reported worse or much worse social life Post-injury and/or illness. Quite small proportions reported better or much better.

Table 108: Respondents' perceptions of social life Post-injury and/or illness

Response	Percentage (n = 505)
Much better	3
Better	5
Neither worse nor better	36
Worse	34
Much worse	22
Total	100

Post-injury and/or illness Community Life

The majority of respondents reported that their involvement in community life had fallen Post-injury and/or illness. Quite small proportions of respondents reported any increases in involvement in community life.

Table 109: Post-injury and/or illness Community Life

Response	Percentage (n = 493)
A lot – hardly ever involved now	40
A little – involvement has reduced	32
No change	23
Greater involvement	3
Much greater involvement	1
Other outcome	1
Total	100

Post-injury and/or illness Social Interaction

Tables 110 to 115 present summaries of respondents' reports about their Post-injury and/or illness social interaction

Table 110: Post-injury and/or illness Social Acceptance

Response	Percentage (n = 486)
Does not apply	48
Barely applies	14
Applies to some extent	26

Table 110: Post-injury and/or illness Social Acceptance (continued)

Response	Percentage (n = 486)
Applies a great deal	12
Total	100

The majority of respondents reported that their social acceptance had been affected to some degree by their Post-injury and/or illness state.

Table 111: Self-Consciousness about Post-injury and/or illness Impairment or Disability

Response	Percentage (n = 505)
Does not apply	24
Barely applies	14
Applies to some extent	32
Applies a great deal	30
Total	100

Three quarters of respondents reported that they were self-conscious to some degree about their Post-injury and/or illness impairment or disability in social situations.

Table 112: Post-injury Illness Social Outings

Response	Percentage (n = 490)
Does not apply	27
Barely applies	9
Applies to some extent	28
Applies a great deal	36
Total	101

Two thirds or more of respondents reported that their Post-injury and/or illness social outings were reduced to some degree from those Pre-injury and/or illness.

Table 113: Post-injury and/or illness Social Contact

Response	Percentage (n = 492)
Does not apply	30

Table 113: Post-injury and/or illness Social Contact (continued)

Response	Percentage (n = 492)
Barely applies	11
Applies to some extent	28
Applies a great deal	31
Total	100

Two thirds or more of respondents reported that their Post-injury and/or illness social contact with non-family members had reduced to some degree from those Pre-injury and/or illness.

Table 114: Presence of Supportive Workmates

Response	Percentage (n = 492)
Does not apply	20
Barely applies	20
Applies to some extent	35
Applies a great deal	25
Total	100

Three quarters or more of respondents reported the presence of supportive workmates to some degree at the time of their injury and/or illness.

Table 115: Feeling Socially Stigmatised Post-injury and/or illness

Response	Percentage (n = 489)
Does not apply	39
Barely applies	14
Applies to some extent	26
Applies a great deal	21
Total	100

A majority of respondents reported feeling socially stigmatised to some degree Post-injury and/or illness.

Having someone who does not live with you to turn to for help in times of crisis

Tables 116 to 123 present summaries of these data.

Table 116: Advice on What to Do

Response	Percentage (n = 492)
Never	14
Rarely	17
Sometimes	37
Always	31
Total	100

Two thirds of respondents reported that they had someone to turn to for advice in times of crisis.

Table 117: Emotional Support

Response	Percentage (n = 486)
Never	19
Rarely	19
Sometimes	32
Always	30
Total	100

The majority of respondents reported that they had someone who does not live with to turn to for emotional support.

Table 118: Ask For Help with Serious Illness or Injury

Response	Percentage (n = 485)
Never	12
Rarely	20
Sometimes	37
Always	31
Total	100

Two thirds of respondents reported having someone who does not live with them to ask for help with a serious illness or injury.

Table 119: Ask For Help With Family or Work Responsibilities

Response	Percentage (n = 488)
Never	23
Rarely	25
Sometimes	29
Always	23
Total	100

A majority of respondents reported that they could ask someone who does not live with them for help with family or work responsibilities.

Table 120: Ask For Emergency Money

Response	Percentage (n = 485)
Never	33
Rarely	22
Sometimes	22
Always	23
Total	100

Slightly less than half of respondents reported that they could ask someone they did not live with for emergency money.

Table 121: Ask For Emergency Accommodation

Response	Percentage (n = 476)
Never	36
Rarely	17
Sometimes	19
Always	28
Total	100

Slightly less than half of respondents reported that they could ask someone who does not live with them for emergency accommodation.

Table 122: Ask for Emergency Food

Response	Percentage (n = 471)
Never	34
Rarely	15
Sometimes	18
Always	33
Total	100

Less than half of respondents reported that they could ask someone who does not live with them for emergency food.

Table 123: Ask for Other Support Not Listed

Response	Percentage (n = 392)
Never	32
Rarely	16
Sometimes	22
Always	30
Total	100

Approximately half of respondents reported that they could ask someone who does not live with them for support like this but not listed above.

Participation in some social activities

Tables 124 to 130 present summaries of these data.

Table 124: Participated In Church or Religious Activities in the Last Three Months

Response	Percentage (n = 505)
Yes	11
No	89
Total	100

A relatively low proportion of respondents reported participating in church or religious activities in the last three months.

Table 125: Went to a Café, Restaurant, or Bar in the Last Three Months

Response	Percentage (n = 505)
Yes	78
No	22
Total	100

Three quarters or more of respondents reported visiting a café, restaurant, or bar in the last three months.

Table 126: Took Part In or Attended Sport or Physical Activities

Response	Percentage (n = 505)
Yes	33
No	67
Total	100

One third of respondents reported taking part in or attending, sport or physical activities in the last three months.

Table 127: Visited a Library, Museum, or Art Gallery

Response	Percentage (n = 505)
Yes	30
No	70
Total	100

Approximately one third of respondents reported visiting a library, museum, or art gallery in the last three months.

Table 128: Attended Movies, Theatre, or Concert

Response	Percentage (n = 505)
Yes	30
No	70
Total	100

Approximately one third of respondents reported attending movies, theatre, or concert in the last three months.

Table 129: Visited Park, Botanic Gardens, Zoo, or Theme Park

Response	Percentage (n = 505)
Yes	30
No	70
Total	100

Approximately one third of respondents reported visiting a park, botanic gardens, zoo, or theme park in the last three months.

Table 130: Participated in None of These Activities

Response	Percentage (n = 505)
Yes	11
No	89
Total	100

A small minority of respondents reported that they had not participated in any of these activities in the last three months.

Current Marital Status

The majority of respondents reported being married currently.

Table 131: Current Marital Status

Response	Percentage (n = 499)
Never married	8
Widowed	2
Divorced	12
Separated	7
Married	62
In a de facto relationship	9
Total	100

Country of Birth

The majority of respondents reported being born in Australia. A minority were born in other countries as shown by the examples.

Table 132: Country of Birth

Response	Percentage (n = 505)
Australia	88
Elsewhere e.g., England, France, Holland, Ireland, New Zealand, Poland, Scotland	12
Total	100

Additional Respondent Comments Summarised

At the end of the survey, respondents were invited to include anything they thought relevant about the study. The greatest proportion of respondents expressed disappointment with the outcomes their claims, and when combined with those whose experience is summarised as bad overall, makes up half of all responses. A proportion of respondents was disappointed with employer behaviour e.g., no care or responsibility shown and not ensuring a safe workplace was provided. Two other proportions of similar size reported that they were pleased to contribute to the study and that they found completion of the survey emotionally taxing but hoped that policy makers will acknowledge the study.

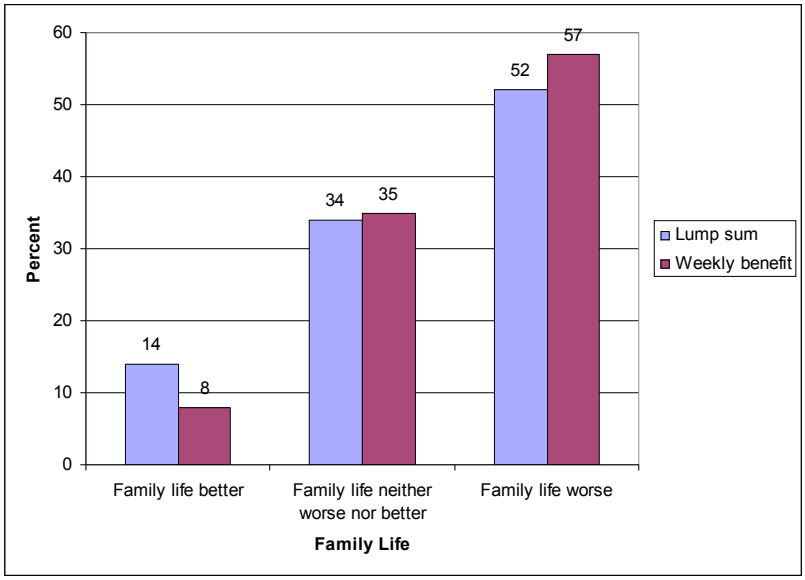
Table 133: Additional Comments Summarised

Comment	Percentage (n = 149)
Bad experience overall	16
Disappointed about outcomes	34
Disappointed about employer behaviour	10
Disappointed about insurer behaviour	5
Felt minimally supported	9
Pleased with outcomes	2
Pleased to contribute to the study	11
Other comments e.g., survey very long, survey was a cathartic and/or emotional experience, hopes the survey will influence policy makers	13
Total	100

Social Outcomes by Compensation Mode

Although all respondents reported significant and negative impacts on their social functioning because of their workplace injury and/or illness (see previous section), these data were not differentiated by compensation mode. Both lump sum and weekly benefits recipients were likely to report similar outcomes. For example, more than half of each group reported that their social life had changed for the worse since their injury and/or illness. The only finding of statistical significance among the social outcomes data is those related to respondents' estimation of their Post-injury and/or illness family life. While a majority of respondents rated their family life as worse overall, a higher proportion of lump sum recipients (14 percent to 8 percent) rated their family life better than did weekly benefit recipient.

Figure 15: Assessment of Family Life Post-injury and/or illness by Compensation Mode



($\chi^2 = 9.480$, $df = 4$, $p = .05$, n = 496)

REFERENCES

1. Australian Bureau of Statistics. (1997a). *Australian standard classification of occupations (ASCO). Second edition.* Cat. No. 1220.0
2. Australian Bureau of Statistics. (1997b). *National health survey. SF-36 population norms.* Cat. No. 4399.0
3. Australian Bureau of Statistics (2003). *Consumer Price Index, Australia, June 2003.* Cat. No. 6401.0.
4. Australian Bureau of Statistics (2004a). *Consumer Price Index, Australia, June 2003.* Cat. No. 6401.0.
5. Australian Bureau of Statistics. (2004b). *General Social Survey, Tasmania, 2002*. Cat. Cat. No. 4159.6.55.001.
6. Australian Bureau of Statistics (2005). *Consumer Price Index, Australia, June 2003.* Cat. No. 6401.0.
7. Australian Bureau of Statistics (2006). *Consumer Price Index, Australia, June 2003.* Cat. No. 6401.0.
8. Australian Bureau of Statistics (2007a). *Consumer Price Index, Australia, June 2003.* Cat. No. 6401.0.
9. Australian Bureau of Statistic. (2007b). *Regional wage and salary earner statistics, Australia.* Cat. No. 5673055003.
10. Baldwin, M.L., Johnson, W.G., & Butler, R.J. (1996). The error of using returns-to-work to measure the outcomes of health care. *American Journal of Industrial Medicine, 29,* 632-641.
11. Bjorner, J.B., Fayers, P., & Idler, E. (2005). Self-rated health. In P. Fayers, & R. Hays (Eds.), *Assessing quality of life in clinical trails: Methods and practice.* Oxford: Oxford University Press.
12. Brazier, J.E., Harper, R., Jones, N.M.B., O'Cathian, A., Thomas, K.J., Usherwood, T., & Westlake, L. (1992). Validating the SF-36 health survey questionnaire: new outcomes measure for primary care. *British Medical Journal, 305,* 160-164.
13. Dembe, A.E. (2001). The social consequences of occupational injuries and illnesses. *American Journal of Industrial Medicine (40),* 403-417.
14. Hee, H.T., Whitecloud, T.S., Myers, L., Gaynor, J., Roesch, W., Ricciardi, J.E. (2001). SF-36 health status of workers compensation cases with spinal disorders. *The Spine Journal 1(3)* 176-182.
15. Henn, R., Kang, L. Tashjian, R., Green, A. (2005). *Workers compensation patients have worse pain, function, and general health after rotator cuff repair*. Programs and abstracts of the American Academy of Orthopaedic Surgeons 72nd Annual Meeting; February 23-27. Washington, DC.
16. Leigh, P., Markowitz, S., Fahs, M., & Landrigan, P. (2000). Costs of occupational injuries and illnesses. Excerpted with permission from *Costs of occupational injuries and illnesses* Ann Arbor: University of Michigan Press.
17. Obremskey, W.T., Dirschl, D.R., Crowther, J.D., Craig, W.L. III, Driver, R.E., LeCroy, C.M. (2002). Change over time of SF-36 functional outcomes for operatively treated unstable ankle fractures. *Journal of Orthopaedic Trauma, 16(1)* 30-33.
18. PricewaterhouseCoopers (2003). *Health, return to work, social and financial outcomes associated with different compensation pathways in NSW: Quantitative survey of claimants.* Sydney, New South Wales:

PricewaterhouseCoopers.
19. Tasmania. (2006).*Occupational black spots injury report: Update 2006*. Hobart, Tasmania: WorkCover Tasmania.
20. Ware, J.E., Snow, K.K., Kosinski, M., & Gandek, B. (1993). *SF-36 Health survey: Manual and interpretation guide.* Lincoln, RI: QualityMetric Inc.
21. Ware, J.E. Jnr. (2000). SF-36 Health Survey Update. *Spine 25(24),* 3130-3139.
22. Wickizer, T.M., Franklin, G., Fulton-Kehoe, D., Turner, J.A., Mootz, R., & Smith-Weller, T. (2004). Patient satisfaction, treatment experience, and disability outcomes in a population-based cohort of injured workers in Washington state: Implications for quality improvement. *Health Services Research 39(4)* 727-748.

APPENDIX 1: DETAILS OF FREQUENCIES FOR EIGHT HEALTH SCALES

Physical functioning

Tables 1.1 to 1.4 present summaries of physical functioning scores from aggregated LTBS responses and relevant ABS Tasmanian population data, including disaggregated physical functioning scores by sex, compensation mode, and age.

Table 1.1: Comparison of aggregated LTBS and ABS scores for physical functioning

Aggregated LTBS score (n = 500)	Aggregated ABS score for Tasmania (n = 901)
58.6	82.1

(t = -17.796, df = 499, p = .00)

Commentary

Proportionally, the aggregated LTBS respondents' physical functioning score was 71.4 per cent of the aggregated ABS Tasmanian population score. The difference between means for the LTBS respondents' scores and the ABS population score was statistically significant at the .05 rejection level.

Table 1.2: Comparison of disaggregated LTBS and ABS scores for physical functioning by sex

Male LTBS score (n = 293)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 200)	Female ABS score Tasmania (n = 482)
56.4	82.9	61.9	81.3

(t = -2.03, df = 491, p = .04)

Commentary

The magnitude of proportional difference for aggregated scores carried through to the disaggregated analysis by sex. Proportionally, the male and female respondents' scores were 68.0 per cent and 76.1 per cent of the disaggregated ABS Tasmanian population scores for males and females respectively. The difference between means was statistically significant.

Table 1.3: Comparison of disaggregated LTBS and scores for physical functioning by compensation mode

Disaggregated LTBS lump sum score (n = 300)	Disaggregated LTBS weekly benefits score (n = 200)	Aggregated ABS score Tasmania (n = 901)
59.0	56.6	82.1

(t = 1.22, df = 498, p = .22)

Commentary

Disaggregated analysis by compensation mode revealed relatively little difference in respondents' physical functioning scores: proportionally, the lump sum respondents' and weekly benefits respondents' scores were 71.9 per cent and 68.9 per cent of the aggregated ABS Tasmanian population score respectively. The difference between means was not statistically significant.

Table 1.4: Comparison of LTBS and ABS scores for physical functioning by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	55.0	70.0	57.1	60.1	56.6	54.8
ABS score	90.1	90.5	88.7	83.3	76.1	66.2
LTBS/ABS (%)	61.0	77.4	64.4	72.0	74.4	82.8

Commentary

While analyses of the distribution of ABS respondents' scores showed a general decline from younger to older age groups for physical functioning, LTBS respondents' scores rose in the middle age groups and fell towards the younger and older ends of the age ranges. As proportions of ABS scores, LTBS respondents' scores tended to rise and fall across age groups, rising at the older end of the age range in opposition to the ABS and LTBS scores. This pattern indicates that older LTBS respondents reported better physical functioning than their younger counterparts.

Role limitations due to physical disorders

Tables 1.5 to 1.8 present summaries of role limitations due to physical disorders scores from aggregated LTBS responses and ABS Tasmanian population data, including disaggregated physical disorders scores by sex, compensation mode, and age.

Table 1.5: Comparison of aggregated LTBS and ABS scores for role limitations – physical

Aggregated LTBS score (n = 474)	Aggregated ABS score for Tasmania (n = 901)
35.4	79.7

(t = -22.951, df = 473, p = .00)

Commentary

Proportionally, the LTBS respondents' aggregated score was 44.4 per cent of the aggregated ABS Tasmanian population score in relation to the role limitations due to physical disorders scale. This proportion is quite low and may reflect the extent of role limitations on physical activities experienced by respondents. The difference between means for the aggregated LTBS respondents' scores and the aggregated ABS Tasmanian population score was statistically significant at the .05 rejection level.

Table 1.6: Comparison of disaggregated LTBS and ABS scores for role limitations – physical by sex

Male LTBS score (n = 277)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 190)	Female ABS score Tasmania (n = 482)
33.6	77.9	38.4	80.9

(t = -1.24, df = 465, p = .22)

Commentary

Similar magnitudes of proportional difference found in the aggregated analysis emerged in the disaggregated analysis by sex: proportionally, disaggregated LTBS male and female respondents' scores were 43.1 percent and 47.5 per cent of the ABS Tasmanian male and female population scores respectively. The difference between means was not statistically significant.

Table 1.7: Comparison of disaggregated LTBS and aggregated ABS scores for role limitations – physical by compensation mode

Disaggregated LTBS lump sum score (n = 281)	Disaggregated LTBS weekly benefits score (n = 192)	Aggregated ABS score Tasmania (n = 901)
37.1	33.6	79.7

(t = .90, df = 471, p = .37)

Commentary

Proportional differences between compensation modes was minimal: the disaggregated LTBS lump sum respondents' and weekly benefits respondents scores were 52.1 per cent and 47.2 per cent of the aggregated ABS population score respectively. The difference between means was not statistically significant.

Table 1.8: Comparison of LTBS and ABS scores for role limitations – physical by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	12.5	41.4	31.4	39.4	35.4	27.8
ABS score	87.4	86.5	85.1	81.8	73.5	62.7
LTBS/ABS (%)	13.7	47.8	36.9	48.2	48.2	44.3

Commentary

In the age-related analysis, ABS scores declined with age steadily while the LTBS scores rose and fell across the age ranges, finally declining at ages 65-74. This rise and fall pattern across the age ranges was reproduced in the relative proportions of LTBS scores to ABS scores, indicating that role limitations due to physical disorders tended to be greatest in the 18-24 years age group and the 35-44 years age group.

Bodily pain

Tables 1.9 to 1.12 present summaries of bodily pain scores from aggregated LTBS responses and ABS Tasmanian population data, and disaggregated bodily pain scores by sex, compensation mode, and age.

Table 1.9: Comparison of aggregated LTBS and ABS scores for bodily pain

Aggregated LTBS score (n = 498)	Aggregated ABS score for Tasmania (n = 901)
39.9	77.2

(t = -27.383, df = 497, p = .00)

Commentary

The patterns established in the former analyses were replicated in these analyses of scores for bodily pain. Proportionally, the aggregated LTBS respondents' score was 51.7 per cent of the aggregated ABS population score. The difference between means for the aggregated LTBS respondents' scores and the aggregated ABS Tasmanian population score was statistically significant at the .05 rejection level.

Table 1.10: Comparison of disaggregated LTBS and ABS scores for bodily pain by sex

Male LTBS score (n = 288)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 203)	Female ABS score Tasmania (n = 482)
38.4	77.4	42.2	77.0

(t = -1.371, df = 489, p = .17)

Commentary

The disaggregated LTBS respondents' scores for sex were low: proportionally, 49.6 per cent of the ABS male population scores and 54.8 per cent of the ABS female population scores respectively. The difference between means was not statistically significant.

Table 1.11: Comparison of disaggregated LTBS and aggregated ABS scores for bodily pain by compensation mode

Disaggregated lump sum LTBS score (n = 300)	Disaggregated weekly benefits LTBS score (n = 198)	Aggregated ABS score Tasmania (n = 901)
40.7	38.7	77.2

(t = .67, df = 496, p = .49)

Commentary

There was little difference between compensation modes: proportionally, the disaggregated LTBS lump sum and weekly benefits respondents' scores were 57.2 per cent and 54.3 per cent of the aggregated ABS population score respectively. The difference between means was not statistically significant.

Table 1.12: Comparison of LTBS and ABS bodily pain scores by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	45.8	40.1	38.7	40.4	39.1	42.9
ABS score	81.6	81.5	79.5	76.2	71.1	68.9
LTBS/ABS (%)	56.1	50.2	48.7	52.5	55.0	62.3

Commentary

In relation to age, ABS scores declined with increasing age. The LTBS scores moved differently, however, falling initially then rising with increasing age. A similar pattern emerged in the LTBS proportion of ABS scores; an initial fall followed by a rise with increasing age, suggesting that respondents in the young to middle age ranges of 25 to 54 years fared worse than their younger or older counterparts in relation to bodily pain.

General health

Tables 1.13 to 1.16 present summaries of general health scores from aggregated LTBS responses and ABS Tasmanian population data, and disaggregated general health scores by sex, compensation mode, and age.

Table 1.13: Comparison of aggregated LTBS and ABS scores for general health

Aggregated LTBS score (n = 490)	Aggregated ABS score for Tasmania (n = 901)
40.6	71.2

(t = -56.349, df = 496, p = .00)

Commentary

Proportionally, the aggregated LTBS respondents' score for general health was 57.0 per cent of the aggregated ABS Tasmanian population score. The difference between means for the aggregated LTBS respondents' scores and the aggregated ABS Tasmanian population scores was statistically significant at the .05 rejection level.

Table 1.14: Comparison of disaggregated LTBS and ABS scores for general health by sex

Male LTBS score (n = 291)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 199)	Female ABS score Tasmania (n = 482)
39.8	70.6	41.8	71.7

(t = -1.784, df =488, p = .08)

Commentary

The magnitudes of proportional difference for the aggregated analyses carried through the disaggregated analyses by sex but did not reach statistical significance between

means. Proportionally, the disaggregated LTBS male and female respondents' scores were 55.1 per cent and 58.3 per cent of the disaggregated ABS male and female Tasmanian population scores respectively.

Table 1.15: Comparison of disaggregated LTBS and aggregated ABS scores for general health by compensation mode

Lump sum LTBS score (n = 301)	Weekly benefits LTBS score (n = 196)	ABS score Tasmania (n = 901)
39.8	41.9	71.2

(t = -1.87, df = 495, p = .06)

Commentary

As with previous analyses, the difference between compensation modes was minimal: proportionally, the disaggregated LTBS lump sum and weekly benefits respondents' scores were 54.6 per cent and 58.9 per cent of the aggregated ABS Tasmanian population score respectively. The difference between means was not statistically significant.

Table 1.16: Comparison of LTBS and ABS general health scores by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	47.8	41.2	40.2	41.0	39.9	40.9
ABS score	73.7	76.3	74.8	71.8	71.1	68.9
LTBS/ABS (%)	64.9	54.0	53.7	57.1	56.0	59.4

Commentary

In relation to age, ABS scores rose initially from the youngest age range then fell as age ranges increased. LTBS scores showed a similar decline in general health scores with age. As a proportion of ABS scores, LTBS scores repeated the pattern of a trend towards decline with increasing age, implying that the youngest respondents reported better general health.

Vitality

Tables 1.17 to 1.21 present summaries of vitality scores from aggregated LTBS responses and ABS Tasmanian population data, and disaggregated vitality scores by sex, compensation mode, and age.

Table 1.17: Comparison of aggregated LTBS and ABS scores for vitality

Aggregated LTBS score (n = 503)	Aggregated ABS score for Tasmania (n = 901)
39.7	64.9

(t = -24.724, df = 502, p = .00)

Commentary

Proportionally, the aggregated LTBS respondents' vitality scores were 61.2 per cent of the aggregated ABS Tasmanian population scores. The difference between means for the aggregated LTBS respondents' scores and the aggregated ABS Tasmanian population score was statistically significant at the .05 rejection level.

Table 1.18: Comparison of disaggregated LTBS and ABS scores for vitality by sex

Male LTBS score (n = 294)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 202)	Female ABS score Tasmania (n = 482)
40.2	65.9	39.7	63.7

(t = .272, df = 494, p = .78)

Commentary

Differences in disaggregated analyses by sex were slight. Proportionally, the disaggregated LTBS male and female respondents' scores were 61.0 per cent and 62.3 per cent of disaggregated ABS Tasmanian male and female population scores respectively. The difference between means was not statistically significant.

Table 1.19: Comparison of disaggregated LTBS and aggregated ABS scores for vitality by compensation mode

Disaggregated LTBS lump sum score (n = 300)	Disaggregated LTBS weekly benefits score (n = 200)	Aggregated ABS score Tasmania (n = 901)
41.1	37.6	64.9

(t = 1.68, df = 501, p = .09)

Commentary

Proportionally, differences by compensation mode were relatively large: disaggregated LTBS lump sum and weekly benefits respondents' scores were 57.7 per and 52.8 per cent of the aggregated ABS Tasmanian population score respectively. The difference between means was not statistically significant, however.

Table 1.20: Comparison of LTBS and ABS vitality scores by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	50.0	34.5	36.6	40.8	40.4	48.1
ABS score	66.5	65.6	65.2	65.8	63.6	60.8
LTBS/ABS (%)	75.2	52.6	56.1	62.0	63.9	79.1

Commentary

The pattern of respondents' age-related vitality scores varied according to source. ABS respondents' score declined steadily with increasing age, while LTBS respondents' scores fell with increasing age in younger age groups and rose thereafter. This patter was mirrored in LTBS respondents' scores as a proportion of ABS scores: an initial decline followed by a rise as age increased, suggesting that older LTBS respondents reported more vitality than their younger counterparts.

Social functioning

Tables 1.21 to 1.24 present summaries of social functioning scores from aggregated LTBS responses and ABS Tasmanian population data, and disaggregated bodily pain scores by sex, compensation mode, and age.

Table 1.21: Comparison of aggregated LTBS and ABS scores for social functioning

Aggregated LTBS score (n = 496)	Aggregated ABS score for Tasmania (n = 901)
54.3	85.6

(t = -23.517, df = 495, p = .00)

Commentary

Proportionally, the aggregated social functioning score for the LTBS respondents was 63.4 per cent of the aggregated ABS Tasmanian population score. The difference between means of the aggregated LTBS respondents' scores and the ABS Tasmanian population score was statistically significant at the .05 rejection level.

Table 1.22: Comparison of disaggregated LTBS and ABS scores for social functioning by sex

Male LTBS score (n = 288)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 201)	Female ABS score Tasmania (n = 482)
54.3	86.0	54.7	85.0

(t =-.139, df =487, p = .89)

Commentary

Differences between LTBS scores and ABS scores were of similar magnitude in analyses of disaggregated data by sex. Proportionally, the disaggregated LTBS male and female respondents' scores were 63.1 per cent and 64.4 per cent of the disaggregated ABS Tasmanian male and female population scores respectively. The difference between means was not statistically significant.

Table 1.23: Comparison of disaggregated LTBS and aggregated ABS scores for social functioning by compensation mode

Disaggregated LTBS lump sum score (n = 298)	Disaggregated weekly benefits LTBS score (n = 198)	Female ABS score Tasmania (n = 901)
56.3	51.3	85.6

(t =1.82, df =494, p = .07)

Commentary

Proportionally, the difference between compensation modes was minimal: the disaggregated LTBS lump sum and weekly benefits respondents' scores were 78.5 per cent and 71.5 per cent of the aggregated ABS Tasmanian population score. The difference between means was not statistically significant.

Table 1.24: Comparison of LTBS and ABS social functioning score by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	75.0	56.0	51.1	55.8	52.8	63.8
ABS score	85.9	86.1	86.2	86.2	84.1	81.9
LTBS/ABS (%)	75.3	65.0	59.3	64.6	62.8	77.9

Commentary

The patterns of respondents' age-disaggregated scores from the ABS and LTBS surveys formed a mirror image of themselves. ABS values tended to rise towards middle age groups and fall towards lower values at the younger and older ends of the age range distribution, while LTBS scores tended to fall towards the centre and rise at the youngest and oldest ends of the age range distribution. Correspondingly, LTBS respondents' proportion of ABS respondents' scores tended to parallel the LTBS scores distribution: a fall in value from younger to middle age ranges followed by an increase towards older age groups. This pattern suggests that younger and older LTBS respondents reported better social functioning that their middle-aged counterparts.

Role limitations due to emotional disorders

Tables 1.25 to 1.28 present summaries of role limitations due to emotional disorders scores from aggregated LTBS responses and ABS Tasmanian population data, and disaggregated bodily pain scores by sex, compensation mode, and age.

Table 1.25: Comparison of aggregated LTBS and ABS scores for role limitations – emotional

Aggregated LTBS score(n = 479)	Aggregated ABS score for Tasmania (n = 901)
47.4	85.1

(t = -19.274, df = 478, p = .00)

Commentary

Proportionally, the aggregated LTBS respondents' score was 55.7 per cent of the ABS Tasmanian population score in respect of role limitations due to emotional disorders. The difference between means for the aggregated LTBS respondents' score and the ABS Tasmanian population score was statistically significant at the .05 rejection level.

Table 1.26: Comparison of disaggregated LTBS and ABS scores for role limitations – emotional by sex

Male LTBS score (n = 278)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 195)	Female ABS score Tasmania (n = 482)
46.3	84.0	49.6	85.8

(t = -.823, df = 471, p = .41)

Commentary

Similar proportions to those of the aggregated analyses were found in disaggregated analyses by sex: the disaggregated LTBS male and female respondents' scores were 55.1 per cent and 57.8 per cent of the disaggregated ABS male and female ABS Tasmanian population score respectively. The difference between means was not statistically significant, however.

Table 1.27: Comparison of disaggregated LTBS and aggregated ABS scores for role limitations – emotional by compensation mode

Disaggregated LTBS lump sum score (n = 285)	Disaggregated LTBS weekly benefits score (n = 194)	ABS score Tasmania (n = 901)
47.4	47.4	85.1

Commentary

The disaggregated LTBS lump sum and weekly benefits respondents' scores proportional to the ABS Tasmanian population scores were identical at 66.6 per cent.

Table 1.28: Comparison of LTBS and ABS sores for role limitation – emotional by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	50.0	59.7	48.6	45.2	47.0	47.4
ABS score	83.7	86.2	84.7	84.7	80.9	76.4
LTBS/ABS (%)	79.7	69.4	57.4	53.4	58.1	62.0

Commentary

In relation to age distribution, the LTBS and ABS respondents' patterns of scores across the age ranges were quite similar: an initial rise followed by a fall from youngest to oldest ages. The pattern of distribution for the relative proportions of LTBS scores to ABS scores showed an initial fall in magnitude followed by a rise from youngest to oldest age groups, indicating that younger and older LTBS respondents reported less role limitations due to emotional disorders than their middle-aged counterparts.

Mental health

Tables 1.29 to 1.32 present summaries of mental health scores from aggregated LTBS responses and ABS Tasmanian population data, and disaggregated bodily pain scores by sex, compensation mode, and age.

Table 1.29: Comparison of aggregated LTBS and ABS scores for mental health

Aggregated LTBS score (n = 503)	Aggregated ABS score for Tasmania (n = 901)
56.3	77.2

(t = -19.674, df = 502, p = .00)

Commentary

Proportionally, the aggregated LTBS score for mental health was 72.9 per cent of the aggregated ABS Tasmanian population score. The difference between means for the aggregated LTBS respondents' scores and the ABS Tasmanian population score was statistically significant at the .05 rejection level.

Table 1.30: Comparison of disaggregated LTBS and ABS scores for mental health by sex

Male LTBS score (n = 293)	Male ABS score Tasmania (n = 419)	Female LTBS score (n = 203)	Female ABS score Tasmania (n = 482)
56.2	77.9	59.9	76.4

(t = -.34, df = 494, p = .73)

Commentary

For disaggregated analyses by sex, LTBS male and female respondents, proportions of disaggregated ABS Tasmanian population scores were similar: the male and female respondents' scores were 72.0 per cent and 78.4 per cent of the ABS male and female population scores respectively. The difference between means was not statistically significant.

Table 1.31: Comparison of disaggregated LTBS and aggregated ABS scores for mental health by compensation mode

Disaggregated LTBS lump sum score (n = 303)	Disaggregated LTBS weekly benefits score (n = 200)	Aggregated ABS score Tasmania (n = 901)
57.8	54.1	77.2

(t = 1.74, df = 501, p = .08)

Commentary

Proportionally, the difference between compensation modes was minimal. The disaggregated LTBS lump sum and weekly respondents' scores were 80.6 per cent and 75.5 per cent of the ABS Tasmanian population score respectively. The difference between means was not statistically significant.

Table 1.32: Comparison of LTBS and ABS mental health scores by age

Measure	Age ranges in years					
	18-24	25-34	35-44	45-54	55-64	65-74
LTBS score	69.0	57.7	53.7	56.4	55.8	67.2
ABS score	75.2	76.2	75.3	76.2	75.9	76.7
LTBS/ABS (%)	91.8	75.0	71.3	74.0	73.5	87.6

Commentary

The scores for ABS respondents maintained a relatively constant value across the age ranges while the LTBS respondents' scores exhibited a fall from younger age groups followed by a rise towards the older age groups. This pattern was repeated in the LTBS respondents' proportions of ABS respondents' scores: a fall from younger age groups followed by a rise towards older age groups, suggesting that younger and older age groups reported better mental health than their middle-aged counterparts.

APPENDIX 2: DETAILS OF FREQUENCIES FOR TRANSITIONAL HEALTH

Transitional health: Health one year ago and now

Question: Compared to one year ago, how would you rate your health in general now?

Tables 2.1 to 2.12 present frequencies of these data for males and females by age group.

Table 2.1: Comparison of LTBS and ABS SF-36 percentages for males' health transition ages 18-24 years 1999-2005

Response	Data source	
	LTBS (n = 1)	ABS (n = 1229)
Much better now	0.0	9.5
Somewhat better now	0.0	18.4
About the same	100.0	63.3
Somewhat worse now	0.0	8.7
Much worse now	0.0	0.2
Total	100.0	100.0

Table 2.2: Comparison of LTBS and ABS SF-36 percentages for males' health transition ages 25-34 years 1999-2005

Response	Data source	
	LTBS (n = 11)	ABS (n = 1980)
Much better now	0.0	7.8
Somewhat better now	0.0	13
About the same	91.7	72.5
Somewhat worse now	8.3	6.2
Much worse now	0.0	0.5
Total	100.0	100.0

Table 2.3: Comparison of LTBS and ABS SF-36 percentages for males' health transition ages 35-44 years 1999-2005

Response	Data source	
	LTBS (n = 61)	ABS (n = 2022)
Much better now	8.2	6.3
Somewhat better now	11.5	11.6

Table 2.3: Comparison of LTBS and ABS SF-36 percentages for males' health transition ages 35-44 years 1999-2005 (continued)

Response	Data source	
	LTBS (n = 61)	ABS (n = 2022)
About the same	60.6	73.4
Somewhat worse now	16.4	7.3
Much worse now	3.3	1.3
Total	100.0	99.9

Table 2.4: Comparison of LTBS and ABS SF-36 percentages for males' health transition ages 45-54 years 1999-2005

Response	Data source	
	LTBS (n = 91)	ABS (n = 1556)
Much better now	3.3	5.6
Somewhat better now	14.3	9.9
About the same	58.2	74.2
Somewhat worse now	20.9	9.6
Much worse now	3.3	0.8
Total	100.0	100.1

Table 2.5: Comparison of LTBS and ABS SF-36 percentages for males' health transition ages 55-64 years 1999-2005

Response	Data source	
	LTBS (n = 72)	ABS (n = 1040)
Much better now	2.8	6.7
Somewhat better now	8.3	9.4
About the same	58.3	71.2
Somewhat worse now	26.4	10.7
Much worse now	4.2	2.0
Total	100.0	100.0

Table 2.6: Comparison of LTBS and ABS SF-36 percentages for males' health transition ages 65-74 years 1999-2005

Response	Data source	
	LTBS (n = 17)	ABS (n = 817)
Much better now	11.8	5.8
Somewhat better now	5.9	6.7
About the same	41.2	71.6
Somewhat worse now	23.5	14.3
Much worse now	17.6	1.7
Total	100.0	100.1

Table 2.7: Comparison of LTBS and ABS SF-36 percentages for females' health transition ages 18-24 years 1999-2005

Response	Data source	
	LTBS (n = 1)	ABS (n = 1338)
Much better now	0.0	11.5
Somewhat better now	100.0	17.5
About the same	0.0	60.8
Somewhat worse now	0.0	9.8
Much worse now	0.0	0.4
Total	100.0	100.0

Table 2.8: Comparison of LTBS and ABS SF-36 percentages for females' health transition ages 25-34 years 1999-2005

Response	Data source	
	LTBS (n = 11)	ABS (n = 2210)
Much better now	9.1	10.7
Somewhat better now	9.1	15.3
About the same	63.6	64.7
Somewhat worse now	9.1	8.3
Much worse now	9.1	1.1
Total	100.0	100.1

Table 2.9: Comparison of LTBS and ABS SF-36 percentages for females' health transition ages 35-44 years 1999-2005

Response	Data source	
	LTBS (n = 38)	ABS (n = 2130)
Much better now	8.2	9.8
Somewhat better now	11.5	14.0
About the same	60.6	68.1
Somewhat worse now	16.4	7.3
Much worse now	3.3	0.8
Total	100.0	100.0

Table 2.10: Comparison of LTBS and ABS SF-36 percentages for females' health transition ages 45-54 years 1999-2005

Response	Data source	
	LTBS (n = 69)	ABS (n = 1589)
Much better now	5.8	8.9
Somewhat better now	17.4	11.3
About the same	44.9	69.8
Somewhat worse now	20.3	8.2
Much worse now	11.6	1.8
Total	100.0	100.0

Table 2.11: Comparison of LTBS and ABS SF-36 percentages for females' health transition ages 55-64 years 1999-2005

Response	Data source	
	LTBS (n = 53)	ABS (n = 1036)
Much better now	9.4	9.2
Somewhat better now	15.1	9.3
About the same	51.0	68.4
Somewhat worse now	24.5	11.0
Much worse now	0.0	2.0
Total	100.0	99.9

Table 2.12: Comparison of LTBS and ABS SF-36 percentages for females' health transition ages 65-74 years 1999-2005

Response	Data source	
	LTBS (n = 2)	ABS (n = 905)
Much better now	0.0	8.1
Somewhat better now	.0.	7.0
About the same	50.0	66.8
Somewhat worse now	50.0	14.6
Much worse now	0.0	3.6
Total	100.0	100.1